



# **RECREATION** *Guidelines*

## **GUIDELINES FOR RECREATION AMENITIES IN RESIDENTIAL DEVELOPMENTS**

TOT LOT ■ PLAY LOT ■ MULTI-AGE PLAYGROUND ■  
PICNIC/SEATING AREA ■ OPEN PLAY AREA ■ VOLLEY-  
BALL COURT ■ BASKETBALL/MULTIPURPOSE COURT ■  
TENNIS COURT ■ HANDBALL COURT ■ RACQUET-  
BALL/SQUASH COURT ■ SOCCER FIELD ■ SOFTBALL  
FIELD ■ BASEBALL FIELD ■ FOOTBALL FIELD ■ BIKE  
SYSTEM ■ PEDESTRIAN SYSTEM ■ TRAILS ■ NATU-  
RAL AREAS ■ SWIMMING POOL ■ WADING POOL ■  
INDOOR EXERCISE ROOM ■ INDOOR FITNESS FACILITY  
■ ■ COMMUNITY GARDEN ■



*The Maryland-National Capital Park & Planning Commission*  
MONTGOMERY COUNTY PLANNING DEPARTMENT  
8787 Georgia Avenue, Silver Spring, Maryland, 20910-3760

**APPROVED** by the  
Montgomery County  
Planning Board  
September 1992

*G u i d e l i n e s*

*f o r*

*R e c r e a t i o n*

*A m e n i t i e s*

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*R e s i d e n t i a l*

*D e v e l o p m e n t s*

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THE GUIDELINES IN THIS PUBLICATION ARE FOR USE IN SITE PLANS FOR RESIDENTIAL SUBDIVISIONS SUBMITTED TO THE MONTGOMERY COUNTY PLANNING BOARD ■ THE PRIVATE RECREATION FACILITIES PROVIDED THROUGH THESE GUIDELINES OFFER AN IMPORTANT SUPPLEMENT TO THE PUBLIC PARK SYSTEM BUT IN NO WAY DIMINISH THE NEED FOR PUBLIC PARKS AS ESTIMATED IN THE PARKS, RECREATION, AND OPEN SPACE (PROS) MASTER PLAN 1988 ■ THE PLANNING BOARD AND THEIR STAFF USE THE GUIDELINES WHEN DETERMINING WHETHER THE RECREATIONAL AMENITIES IN A SITE PLAN ARE ADEQUATE ■ IN THE CASE OF A MULTI-PHASED DEVELOPMENT, THE COMPREHENSIVE RECREATION PLAN WILL BE REVIEWED AT THE FIRST PHASE ■ THE RECREATION NEEDS OF THE ENTIRE DEVELOPMENT WILL BE TAKEN INTO CONSIDERATION WHEN INDIVIDUAL PHASES ARE REVIEWED ■ THE RECREATION FACILITIES DESCRIBED IN THIS PLAN WILL BE MAINTAINED BY A HOMEOWNERS' ASSOCIATION, MANAGEMENT COMPANY, OR CONDOMINIUM ASSOCIATION ■ THIS PUBLICATION USES THE TERMS "NEIGHBORHOOD" AND "COMMUNITY" INTERCHANGEABLY TO REFER TO THE PROPOSED SUBDIVISION OR PROJECT ■

EXCEPT WHERE NOTED, NONE OF THE SPECIFIC GUIDELINES ARE AN ABSOLUTE REQUIREMENT, NOR DOES ANY OF THE CRITERIA NECESSARILY CARRY ANY GREATER WEIGHT THAN ANOTHER IN THE EVALUATION OF THE ADEQUACY OF THE RECREATION FACILITIES ■ WHILE THEY WILL HELP TO ES-

TABLISH ADEQUATE AND APPROPRIATE PROVISIONS FOR RECREATION, IT IS RECOGNIZED THAT THEY MAY, IN SOME CASES, CONFLICT WITH OTHER COUNTY POLICIES ■ IN SUCH CASES, THE BOARD MAY OPT TO TRADE OFF THE RECREATIONAL ADEQUACY FOR OTHER GOALS ■

THE GUIDELINES WERE DEVELOPED WITH AN ADVISORY WORK GROUP TO ASSURE THE ADEQUACY OF RECREATION IN TERMS OF QUANTITY, QUALITY, LOCATION, LINKAGES, AND LAYOUT (SEE APPENDIX A . THE PROCESS) ■ THEY INCLUDE A QUANTITATIVE METHOD AS WELL AS SITE DESIGN AND FACILITIES CRITERIA ■ THE QUANTITATIVE SYSTEM IS BASED ON MONTGOMERY COUNTY DEMOGRAPHICS ■ THE APPLICANT MAY DEMONSTRATE THAT THE PROJECTED POPULATION IN A PARTICULAR PROJECT WILL BE DIFFERENT FROM THE AVERAGES USED HERE AND PROPOSE A DIFFERENT PACKAGE OF AMENITIES, PROVIDED IT IS ADEQUATE ■

THE QUANTITATIVE SYSTEM IS INTENDED TO ENSURE A CONSISTENT AND ADEQUATE LEVEL OF RECREATION FOR THE POPULATION OF ANY GIVEN PROJECT ■ THE SYSTEM PROVIDES A STANDARD MEASURE FOR ESTIMATING THE RECREATION DEMAND OF THE FUTURE POPULATION OF A PROPOSED PROJECT AND EVALUATING THE SUPPLY OF RECREATIONAL OPPORTUNITIES WITHIN THE PROPOSED FACILITIES ■ THE PROVISION OF RECREATION FACILITIES IS CONSIDERED ADEQUATE WHEN THE SUPPLY MEETS THE DEMAND ■ THE QUANTITATIVE SYSTEM IS FLEXIBLE: THE DEMOGRAPHIC DATA MAY BE UPDATED AND FACILITIES MAY BE ADDED OR DELETED AS NECESSARY ■

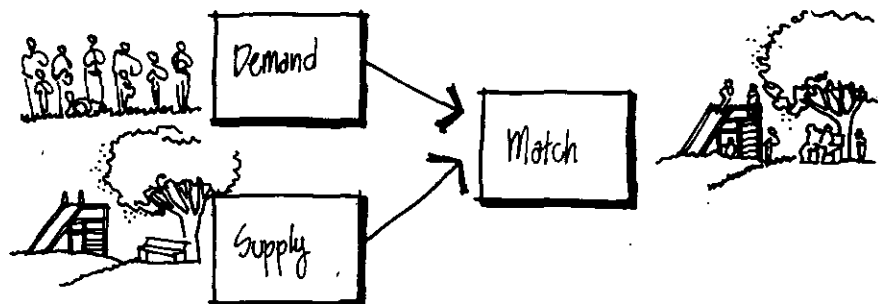
# SELECTING ADEQUATE RECREATION FACILITIES FOR RESIDENTIAL DEVELOPMENTS

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This section contains a method for evaluating whether the recreation facilities proposed for a particular community will be adequate. The method has three steps:

1. Estimate demand for recreation using DEMAND TABLE. The result is **demand points**.
2. Estimate how well the proposed facilities will serve the population, using the SUPPLY TABLE. The result is **supply points**.
3. Compare one and two. If they are within 10% for each population category, the proposed facilities are considered adequate.

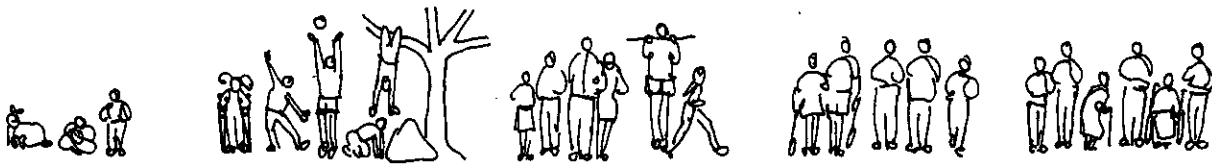
The demand and supply tables are based on the premise that the balance of their values establishes an adequate level of recreation.



## ESTIMATING THE DEMAND FOR RECREATION

The estimate of demand for recreation is based on the demographics of Montgomery County. The demographic data are weighted against other factors, such as density in particular (see APPENDIX B). If demonstrated that the demographics of the proposed development will be different from the applicable County averages, new demand figures may be developed based on Appendices B and D.

- The demand for recreation is estimated for each **population category** - Tots, Children, Teens, Adults, and Seniors.



- The demand is estimated for each **housing type** - Single Family Detached (and semi-detached), Townhouse (and single-family attached), Garden Apartments, and High Rise Apartments.

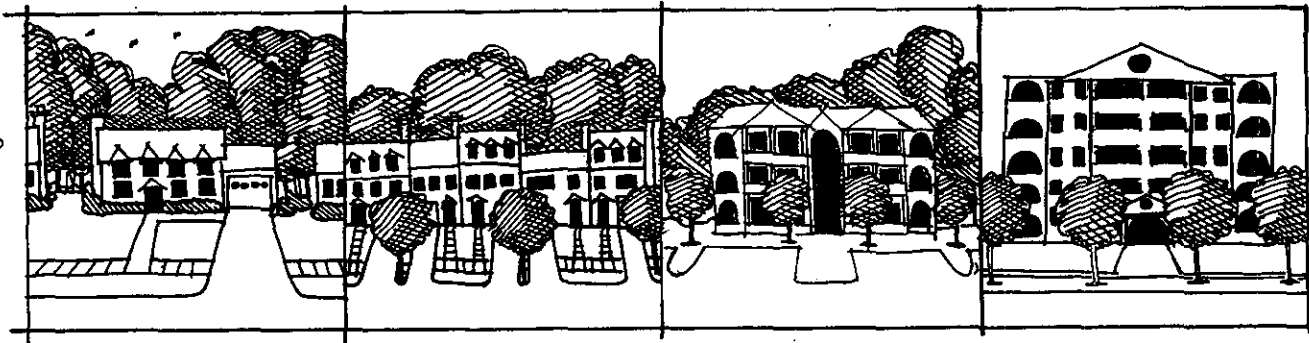




TABLE 1 provides the demand points for each population category for **100 dwelling units** in each housing type. These points represent an effective number of users.

**TABLE 1 - DEMAND**

DEMAND POINTS FOR POPULATION CATEGORIES FOR 100 DWELLING UNITS

HOUSING TYPE	POPULATION CATEGORY				
	D1 Tots	D2 Children	D3 Teens	D4 Adults	D5 Seniors
	0 - 4	5 - 11	12 - 17	18 - 64	65+
SFD I	10	20	22	85	8
SFD II	13	24	25	106	11
SFD III	14	19	23	127	13
TH	17	22	18	129	7
Garden	11	14	12	118	16
Hi-Rise	4	4	4	77	46

## DEFINITIONS

- SFD I Single-Family Detached, lots 20,000+ sf.
- SFD II Single-Family Detached, lots 7,000 - 19,999 sf.
- SFD III Single-Family Detached and Semi-Detached, lots under 7,000 sf.
- TH Townhouses and Single-Family Attached
- GARDEN Multiple-Family, 4 stories or less
- HI-RISE Multiple-Family, 5 stories or more

## EVALUATING THE SUPPLY OF RECREATIONAL FACILITIES

- The proposed provision of recreational facilities is evaluated based on its **recreational benefits for each population category** (see APPENDIX C). In TABLE 2, a **value** is assigned to each facility for each population category. If demonstrated that the demographics of the proposed development will be different from the applicable County averages, new supply values may be developed based on Appendices A, B and C (see APPENDIX B).
- Facilities 1 through 15 have absolute recreation values. These are based on the capacity of each facility weighted by a factor that reflects its utility to the users (see APPENDIX C). Proportionate adjustment of amenity size and associated supply points may be considered on a case by case basis, at staff review level subject to the final authority of the Planning Board.
- Facilities 20 through 28 do not have a defined capacity but are assumed to adequately accommodate the population of the proposed development. Their size should be determined for each development independently. These facilities have a designated **Utility Factor** which is the fraction of recreation demand met by the facility (for each population category). These factors must be multiplied by the demand points of each population category (see TABLE 1) to produce the recreation value.
- For example, the value of a pedestrian system for tots in a subdivision of 100 townhouses is: 17 (demand points) x 0.10 (utility factor) = 1.7.

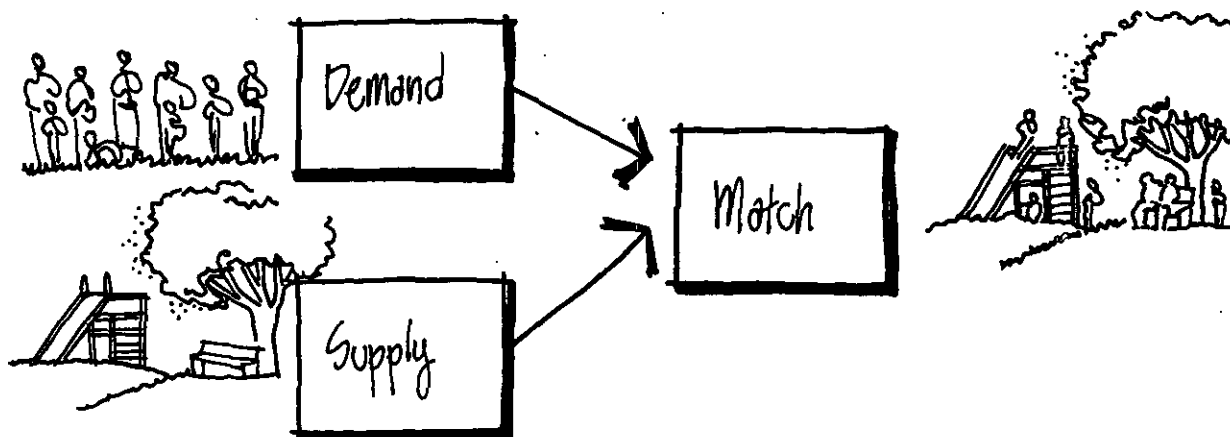
**TABLE 2 - SUPPLY****SUPPLY VALUES OF RECREATION FACILITIES**

Type	Tots	Children	Teens	Adults	Seniors
1. Tot Lot 0 - 6)	9	2	0	4	1
2. Play Lot (5 - 14)	0	9	3	4	1
3. Multi-Age Playground	9	11	3	7	1
4. Picnic/Sitting	1	1	1.5	5	2
5A. Open Play Area I	6	9	12	30	2
5B. Open Play Area II	3	4	4	10	1
6. Volleyball	2	2	3	8	1
7A. Multipurpose (MP) Court	3	10	15	10	2.5
7B. Half MP Court I	2	5	7	8	1
7C. Half MP Court II	2	5	4	5	1
8. Tennis	0	1.5	10.5	24	1
9. Handball	0	1.5	2	4	1
10. Indoor Racquetball	0	1.5	4	8	1
11. Horseshoes	0	2	2	4	3
12A. Soccer-Regulation	2	15	20	40	2
12B. Soccer-Junior	2	15	15	30	2
13A. Softball-Regulation	2	15	20	40	2
13B. Softball-Junior	2	15	15	30	2
14A. Baseball-Regulation	2	15	20	40	2
14B. Baseball-Junior	2	15	15	30	2
15A. Football-Regulation	2	15	20	40	2
15B. Football-Junior	2	15	15	30	2
20. Bike System	0.05xD1	0.10xD2	0.15xD3	0.15xD3	0.10xD5
21. Pedestrian System	0.10xD1	0.20xD2	0.20xD3	0.45xD4	0.45xD5
22. Nature Trails	0.05xD1	0.10xD2	0.15xD3	0.15xD4	0.15xD5
23. Natural Areas	0.00xD1	0.05xD2	0.10xD3	0.10xD4	0.05xD5
24A. Swimming Pool	0.055xD1	0.205xD2	0.205xD3	0.25xD4	0.15xD5
24B. Wading Pool	0.15xD1	0.05xD2	0.00xD3	0.05xD4	0.05xD5
25. Indoor Swimming Pool	0.10xD1	0.20xD2	0.20xD3	0.30xD4	0.40xD5
26A. Indoor Community Space	0.10xD1	0.15xD2	0.30xD3	0.30xD4	0.40xD5
26B. Indoor Exercise Room	0.10xD1	0.1xD25	0.30xD3	0.30xD4	0.40xD5
27. Indoor Fitness Facility	0.00xD1	0.10xD2	0.10xD3	0.20xD4	0.15xD5
28. Community Garden	0.10xD1	0.10xD2	0.10xD3	0.20xD4	0.25xD5

## THE PROCEDURE - TESTING THE ADEQUACY OF RECREATION FACILITIES

The sum of the **supply points** should match (within 10%) or exceed the **demand points** for each population category. The reviewer will assure that additional objectives, such as diversity of the recreational experiences, are met in the proposed provision of facilities. In the case of a multiphased development, the recreation needs of the entire development will be taken into consideration when individual phases are reviewed.

In the following example, the procedure is followed for a proposed development of 100 townhouses and 50 single family detached homes.



## STEP 1 CALCULATE DEMAND POINTS

THE RECREATION DEMAND FOR EACH POPULATION GROUP IS CALCULATED BY USING TABLE 1. THE FOLLOWING NUMBERS REPRESENT THE DEMAND FOR RECREATION IN A SUBDIVISION OF 100 TOWNHOUSES AND 50 SINGLE FAMILY DETACHED HOMES FOR TOTS (D1), CHILDREN (D2), TEENS (D3), ADULTS (D4), AND SENIORS (D5).

	D1	D2	D3	D4	D5
	Tots	Children	Teens	Adults	Seniors
100 TH *	17.0	22.0	18.0	129.0	7.0
50 SFD II *	6.5	12.0	12.5	53.0	5.5
<b>TOTAL</b>	<b>23.5</b>	<b>34.0</b>	<b>30.5</b>	<b>182.0</b>	<b>12.5</b>

\* See Page 3 for Definition

## STEP 2

### CALCULATE SUPPLY POINTS

THE RECREATION VALUE OF THE PROPOSED COMBINATION OF RECREATION FACILITIES (A) IS CALCULATED FOR EACH AGE GROUP.

Combination A	D1	D2	D3	D4	D5
1 Multi-Age Playground	9.0	11.0	3.0	7.0	1.0
6 Picnic/Sitting	6.0	6.0	9.0	30.0	12.0
1 Open Play Area I	6.0	9.0	12.0	30.0	2.0
1 Pedestrian System	2.3	6.8	6.1	81.9	5.6
Natural Area	.0	1.7	3.0	18.2	.6
<b>TOTAL</b>	<b>23.3</b>	<b>34.5</b>	<b>33.1</b>	<b>167.1</b>	<b>21.2</b>

## STEP 3

### COMPARE SUPPLY AND DEMAND

IN THIS CASE, THE SUPPLY POINTS MEET THE DEMAND POINTS (WITHIN 10%) FOR EACH POPULATION CATEGORY. THIS COMBINATION IS THEREFORE CONSIDERED ADEQUATE FOR THE POPULATION OF THE PROPOSED DEVELOPMENT.

	D1	D2	D3	D4	D5
	Tots	Children	Teens	Adults	Seniors
Demand	23.5	34.0	30.5	182	12.5
Supply	23.3	34.5	33.1	167.1	20.7

## STEP 4

### REVISE (if necessary)

IF THE SUM OF THE SUPPLY POINTS IS LOWER THAN THE SUM OF THE DEMAND POINTS BY MORE THAN 10% FOR ANY POPULATION CATEGORY, THE COMBINATION OF FACILITIES SHOULD BE REVISED AND TESTED AGAIN. IN THIS EXAMPLE, NO SUCH REVISION IS NECESSARY.

## STEP 5

### APPLY SITE DESIGN GUIDELINES

THE PROPOSED COMBINATION OF FACILITIES SHOULD ALSO MEET THE SITE DESIGN GUIDELINES.

Several other combinations, such as the following, would satisfy the recreation demand for the proposed subdivision of 150 units. The provision of expensive facilities (see COMBINATION D) will not be adequate until the needs of young children are also addressed.

	D1 Tots	D2 Children	D3 Teens	D4 Adults	D5 Seniors
<b>DEMAND</b>	<b>23.5</b>	<b>34.0</b>	<b>30.5</b>	<b>182.0</b>	<b>12.5</b>
<b>Combination B</b>	<b>D1</b>	<b>D2</b>	<b>D3</b>	<b>D4</b>	<b>D5</b>
1 Pedestrian System	2.3	6.8	6.1	81.9	5.6
1 Bike System	1.0	3.4	4.6	27.3	1.2
Multi-Age Playground	9.0	11.0	3.0	7.0	1.0
Multipurpose Court	3.0	10.0	15.0	10.5	2.5
Open Play II	3.0	4.0	4.0	10.0	1.0
6 Picnic/Sitting	6.0	6.0	9.0	30.0	12.0
<b>TOTAL</b>	<b>24.3</b>	<b>41.2</b>	<b>41.7</b>	<b>166.7</b>	<b>23.3</b>
<b>Combination C</b>	<b>D1</b>	<b>D2</b>	<b>D3</b>	<b>D4</b>	<b>D5</b>
Nature Trail	1.0	3.4	4.6	27.7	1.8
Pedestrian System	2.3	6.8	6.1	81.9	5.6
1 Open Play Area I	6.0	9.0	12.0	30.0	2.0
1 Tennis	0.0	1.5	10.5	24.0	1.0
1 Multi-Age Playground	9.0	11.0	3.0	7.0	1.0
4 Picnic/Sitting	4.0	4.0	6.0	20.0	8.0
<b>TOTAL</b>	<b>22.3</b>	<b>35.7</b>	<b>42.2</b>	<b>190.2</b>	<b>19.4</b>
<b>Combination D</b>	<b>D1</b>	<b>D2</b>	<b>D3</b>	<b>D4</b>	<b>D5</b>
1 Pedestrian System	2.3	6.8	6.1	81.9	5.6
1 Swimming Pool	1.0	6.8	6.1	45.5	1.9
1 Wading Pool	3.5	1.7	0.0	9.1	0.6
2 Tennis Courts	0.0	3.0	21.0	48.0	2.0
1 Tot Lot	9.0	2.0	0.0	4.0	1.0
1 Multi-Age Playground	9.0	11.0	3.0	7.0	1.0
3 Picnic/Sitting	3.0	3.0	4.5	15.0	6.0
<b>TOTAL</b>	<b>27.8</b>	<b>34.3</b>	<b>40.7</b>	<b>210.5</b>	<b>18.1</b>

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## OFF-SITE AMENITIES

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### DEFINITION

All publicly owned recreation facilities within approximately 1 mile from the site boundary, and which do not restrict any segments of the public, may be counted. In order to qualify, the facility must be safely linked to the site and reasonably accessible by foot or bicycle to the site. Car accessibility may be considered for some facilities, such as swimming pools. The staff will review the off-site facilities for adequacy to determine the applicable credit.

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### CREDIT

- The credit for each off-site facility must not exceed 35% of its supply value for each population category.
- The total credit for all off-site facilities must not exceed 35% of the required demand points for each population category.
- The total credit for all off-site facilities must not exceed 35% of the required demand points for each population category.

## THRESHOLDS

The following may be exempted from meeting the adequacy test for recreation:

1. Communities where lot sizes exceed one acre; and,
2. Subdivisions with less than 25 single-family homes.

If a site is exempted from meeting the adequacy of recreation facilities, a common area, such as a sitting area, and safe linkages should be provided.

The following adjustments may be considered for subdivisions with less than 50 units:

1. Supply values may be within 20% of demand values for each population category so long as they are within 10% for the total population.
2. The reviewer may consider adjustments to setback requirements in order to meet the adequacy.



## DEFINITIONS

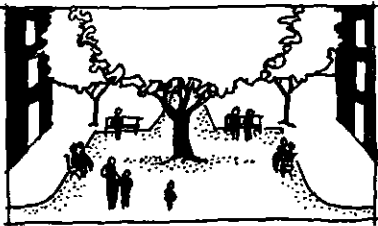
1. TOT LOT basic facility with play features to support 5 activities for tots and preteens (ages 0-6).
2. PLAY LOT basic facility with play features to support 5 activities geared to teens and preteens (ages 5 -14).
3. MULTI-AGE PLAYGROUND large facility with play features to support 10 activities for tots, children, and teens (ages 0 -17).
4. PICNIC/SITTING AREA 1 picnic table or 2 benches.
- 5A. OPEN PLAY AREA I 10,000 square feet of level open grass area to accommodate several activities, such as volleyball, kite flying, badminton, frisbees, and soccer practice.
- 5B. OPEN PLAY AREA II 5,000 square feet of level open grass area to accommodate several activities, such as volleyball, frisbees, badminton and ball play.
6. VOLLEYBALL COURT a grassy area with poles and net for volleyball.
- 7A. BASKETBALL/MULTI-PURPOSE (MP) COURT paved full court for basketball and several other activities, such as tricycling, skate boarding, and roller skating; includes 2 basketball standards.
- 7B. HALF BASKETBALL/MP COURT II (CROSS COURT) paved 1/2 court for basketball and several other activities, such as tricycling, skate boarding, and roller skating; includes 2 basketball standards.
- 7C. HALF BASKETBALL/MP COURT II paved 1/2 court for basketball and several other activities, such as tricycling, skate boarding, and roller skating; includes 1 basketball standard.
8. TENNIS regulation tennis court.
9. ONE-WALL HANDBALL one-wall handball court with concrete surface with wall.
10. INDOOR RACQUETBALL/SQUASH an indoor court for two players.
11. HORSESHOES a level space with iron stakes driven into the ground 40 feet apart.
- 12A. SOCCER FIELD (REGULATION) regulation size soccer field.
- 12B. SOCCER FIELD (JUNIOR) junior size soccer field.
- 13A. SOFTBALL (REGULATION) regulation size softball field.
- 13B. SOFTBALL (JUNIOR) junior size softball field.
- 14A. BASEBALL (REGULATION) regulation size baseball field.
- 14B. BASEBALL (JUNIOR) junior size baseball field.

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|------|-------------------------|--|
| 15A. | FOOTBALL (REGULATION)   | regulation size football field.  |
| 15B. | FOOTBALL (JUNIOR)       | junior size football field.  |
| 20.  | BIKE SYSTEM             | a system of bike routes, bike paths, and bike lanes that provides safe bike access and recreational biking opportunities for the proposed project.   |
| 21.  | PEDESTRIAN SYSTEM       | a network of sidewalks and paths that provides adequate and safe pedestrian link-ages to major destinations and recreational opportunities for the proposed project.                                   |
| 22.  | NATURE TRAILS           | trails that provide access and opportunities to interact with nature.  |
| 23.  | NATURAL AREAS           | substantial areas of natural preserve, such as woodland, wetland, ponds, and, creeks, where access is possible without formal paths. These provide creative play opportunities and exposure to nature. |
| 24A. | SWIMMING POOL           | includes lap lanes and deck, sized to accommodate the proposed community based on Montgomery County Health Department Standards.   |
| 24B. | WADING POOL             | sized to accommodate tots of the proposed community.   |
| 25.  | INDOOR SWIMMING POOL    | includes lap lanes and is sized to accommodate the proposed community.   |
| 26A. | INDOOR COMMUNITY SPACE  | a multipurpose facility sized to accommodate the proposed community; may include a variety of rooms for social and other activities.   |
| 26B. | INDOOR EXERCISE ROOM    | a small gymnasium sized to accomodate the proposed community.  |
| 27.  | INDOOR FITNESS FACILITY | designed to accomodate the development; may include various exercise activities.   |
| 28.  | COMMUNITY GARDEN        | garden plots for the use of the residents of the proposed projects.  |

# SITE DESIGN GUIDELINES

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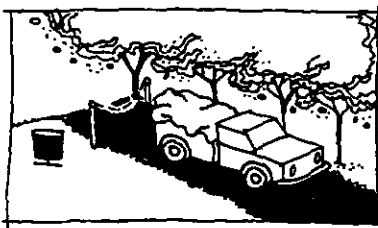
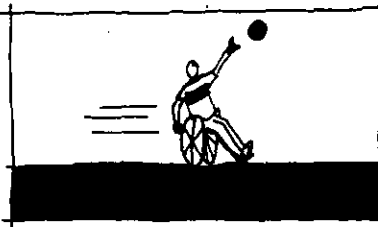
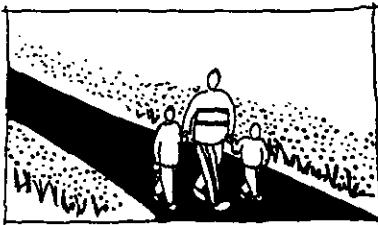
## LOCATION



The location of the recreation facilities should be determined by the following:

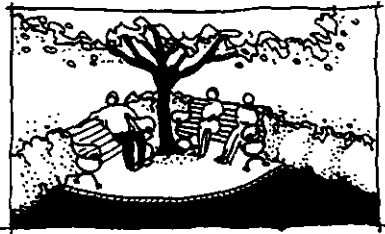
- Facilities should be located within reasonable and appropriate walking distance.
- Facilities should be appropriately located to help draw people, provide a sense of security, and create a sense of community.

## ACCESSIBILITY



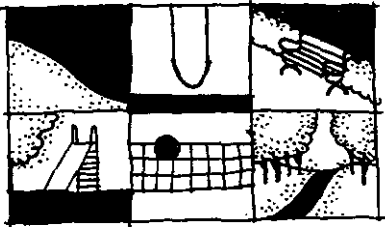
- A system of roads and paths of suitable location and width should be provided to ease access from the units to recreational facilities.
- Main pathways should connect main points of access to facilities.
- Consideration should be given to handicapped accessibility.
- Play areas should be designed to minimize potential contact between children and traffic hazards.
- Play areas within the playground should be accessible from main pathways.
- Entrances to recreation facilities should be clearly identified and used to direct child pedestrians along safe routes to the playground.
- Reasonable access for maintenance must be provided.
- Adequate parking facilities should be provided at recreation sites, particularly where large facilities, such as ballfields or swimming pools are provided.

### ENCOURAGING SOCIAL CONTACT



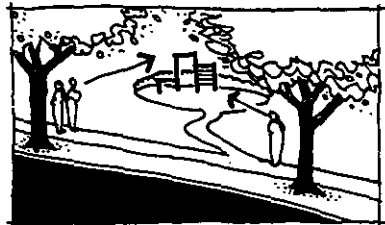
- Settings that stimulate social interaction - bench and platform groupings, sitting areas, small shelters - should be provided.
- Visual barriers should be avoided.

### DIVERSITY



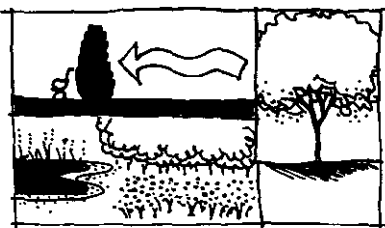
- Diverse play settings should be provided to generate the greatest variety of play activity patterns. Playground equipment should be provided in most cases.
- A variety of active and passive recreational facilities should be provided.

### DEFENSIBLE SPACE AND VISIBILITY



- Except as determined by the Planning Board, recreation areas must be visible from adjacent units and/or street.
- Visual barriers into the facility, such as tall hedges, should be avoided.

### LANDSCAPING

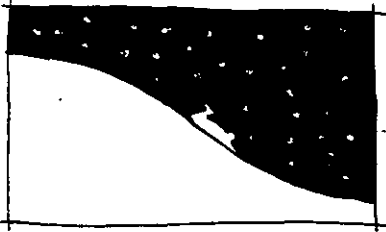


- An attractive variety of landscape settings should be provided.
- Landscaping should also be used to improve the microclimate of the facility to provide shade and protection from wind.

## EFFECTIVE LAYOUT OF ENTIRE AREA

- To assure safety and a satisfactory plan, adequate space should be allowed for all facilities.
- In large facilities, clearly defined entrances should be provided to orient users to the site.

## UTILIZATION AND CONSERVATION OF NATURAL FEATURES

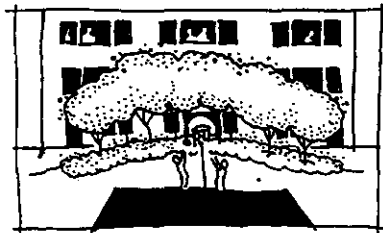


- Natural features may be preserved and utilized for recreation. A natural slope may be used for an outdoor theater or for winter sports, a grove of trees for a picnic area or music shell, and a large, level open area for an athletic field. Suitable, properly located trees should be preserved.

## SAFETY

- The location and arrangement of apparatus, game courts and fields, roads, and paths should be designed to assure safety.

## CONSIDERATION OF NEIGHBORS

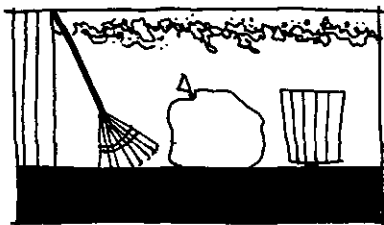


- The recreation area should be designed so as to give the adjacent units a minimum of annoyance considering normal utilization of the site. Sections adjoining residential property should be used for relatively quiet activities; play fields and courts should be laid out so balls will not be batted into adjacent yards and lights should not shine into adjacent homes. Use of berms and landscaping should be considered for compatibility.

## APPEARANCE

- Every recreation area should be designed to present a pleasing appearance from within and without. The use of harmonious color choices, visual coordination of materials, and pleasing forms is important to achieve a high visual quality.

## MAINTENANCE



- Adequate provisions for maintenance must be made for all facilities. Careful planning must assure economy in maintenance.



# FACILITIES GUIDELINES

## 1. TOT LOT

**DEFINITION** Basic facility with play features to support 5 activities for Tots (ages 0 - 6).

**AREA** Minimum area 1,000 sf.

**POSSIBLE ACTIVITIES** Climbing, Swinging, Spinning, Sliding, Balancing, Jumping, Hanging, Creative Play, Crawling, Hiding, Rocking, Rolling, Bouncing, Digging, Sand and Water Play.  
Must Include: Climbing and Sliding.

**SETBACKS** 30 feet from building.  
30 feet from curb.

Setbacks may be reduced in multi-family communities provided that other measures, such as landscaping and fencing, are used as necessary to achieve compatibility.

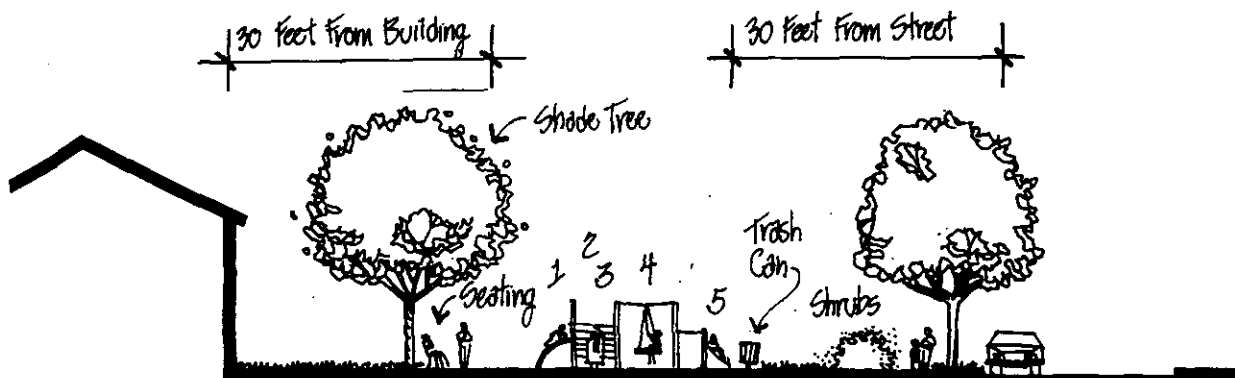
**SCREENING/LANDSCAPING** Shade trees; planting to define the area; low shrubbery to separate from the street.

**OTHER FEATURES** Adjacent seating area and trash receptacle should be provided.

**DESIGN SPECIFICATIONS** Must comply with playground equipment design specifications (Section IV - A).

### SUPPLY VALUES

Tots	Children	Teens	Adults	Seniors
9	2	0	4	1



## 2. PLAY LOT (OLDER CHILDREN)

**DEFINITION** Basic facility with play features to support 5 activities for Teens and Preteens (ages 5 - 14).

**AREA** Minimum area 1,500 sf.

**POSSIBLE ACTIVITIES** Climbing, Swinging, Spinning, Sliding, Balancing, Jumping, Hanging, Creative Play, Bouncing, Athletic Equipment, and Water Play.

Must Include: Climbing and Sliding.

**SETBACKS** 50 feet from building.  
30 feet from curb.

Setbacks may be reduced in multi-family and townhouse communities provided that other measures, such as landscaping and fencing, are used as necessary to achieve compatibility.

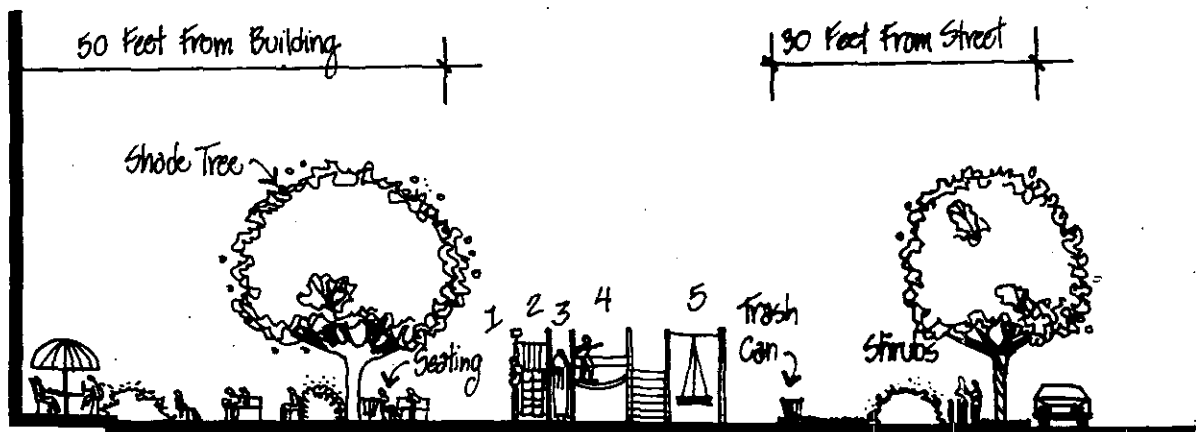
**SCREENING/LANDSCAPING** Shade trees; planting to define the area; low shrubbery to separate from the street.

**OTHER FEATURES** Adjacent seating area and trash receptacle should be provided.

**DESIGN SPECIFICATIONS** Must comply with playground equipment design specifications (Section IV - A).

### SUPPLY VALUES

Tots	Children	Teens	Adults	Seniors
0	9	3	4	1





### 3. MULTI-AGE PLAYGROUND

**DEFINITION** Basic facility with play features to support 10 activities for Tots, Children, and Teens (ages 0 - 14).

**AREA** Minimum area 2,500 sf.

**POSSIBLE ACTIVITIES** Climbing, Swinging, Spinning, Sliding, Balancing, Jumping, Hanging, Creative Play, Crawling, Hiding, Rocking, Rolling, Bouncing, Digging, Exercise Equipment, Sand and Water Play.

Must Include: Climbing and Sliding.

**SETBACKS** 50 feet from building.  
30 feet from curb.

Setbacks may be reduced in multi-family and townhouse communities provided that other measures, such as landscaping and fencing, are used as necessary to achieve compatibility.

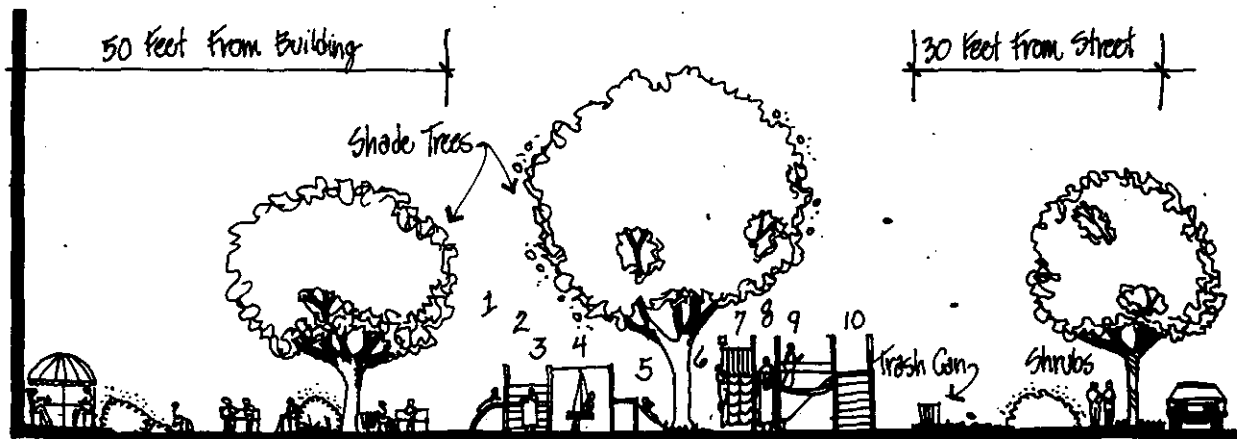
**SCREENING/LANDSCAPING** Shade trees; planting to define the area; shrubbery to separate from the street.

**OTHER FEATURES** Adjacent seating area and trash receptacle should be provided.  
Wherever possible, tot equipment should be physically separated.

**DESIGN SPECIFICATIONS** Must comply with playground equipment design specifications (Section IV - A).

#### SUPPLY VALUES

Tots	Children	Teens	Adults	Seniors
9	11	3	7	1



#### 4. PICNIC/SEATING AREA

**DEFINITION** A total of 1 picnic table or 2 benches to accommodate 6 people.

**POSSIBLE ACTIVITIES** Sitting, Picnicking, and Gathering.

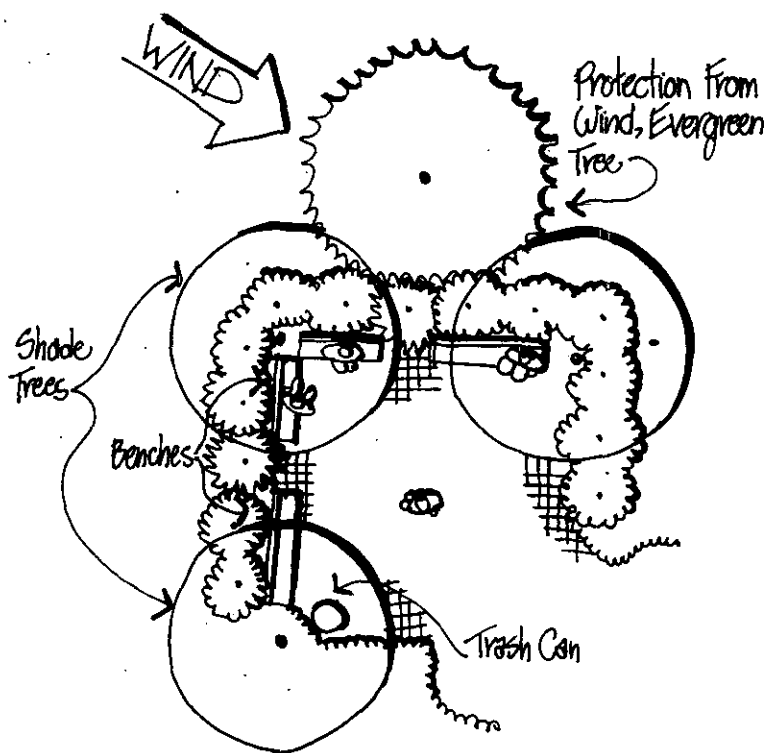
**SCREENING/LANDSCAPING** Provide protection from sun and wind through the use of shade trees and evergreen trees.

**OTHER FEATURES** A trash receptacle should be provided in picnic areas and in larger sitting areas.

**DESIGN SPECIFICATIONS** Must comply with seating design specifications (Section IV - E).

##### SUPPLY VALUES

Tots	Children	Teens	Adults	Seniors
1	1	1.5	5	2



## 5A. OPEN PLAY AREA I

**DEFINITION** Open, level grass area to accommodate several play activities.

**DIMENSIONS** Minimum area ..... 10,000 sf.  
Minimum width ..... 60 ft

**POSSIBLE ACTIVITIES** Volleyball, Kite Flying, Badminton, Frisbee, Soccer Practice, and Croquet.

**SETBACKS** 30 feet from building.  
30 feet from curb.

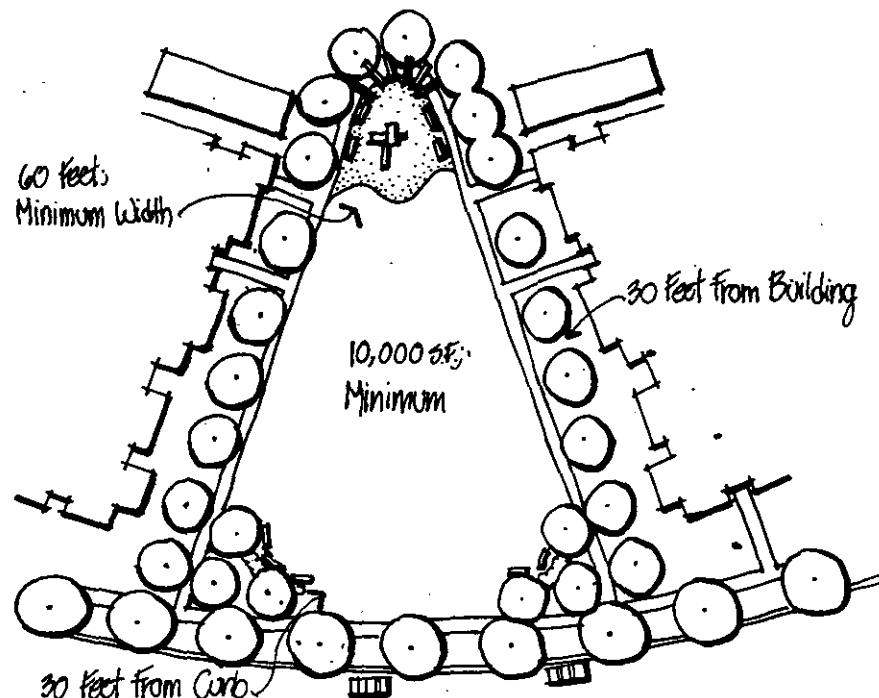
Setbacks may be reduced in multi-family and townhouse communities provided that other measures, such as landscaping and fencing, are used as necessary to achieve compatibility.

**SCREENING/LANDSCAPING** Use landscaping to define the area. Consideration should be given to maintenance requirements as well as compatibility with the surrounding landscape.

**DRAINAGE** Positive, slope 2 - 5%.

### SUPPLY VALUES

Tots	Children	Teens	Adults	Seniors
6	9	12	30	2



## 5B. OPEN PLAY AREA II

**DEFINITION** Open, level grass area to accommodate several play activities.

**DIMENSIONS** Minimum area ..... 5,000 sf.  
Minimum width ..... 45 ft.

**POSSIBLE ACTIVITIES** Volleyball, Badminton, Frisbee, and Croquet.

**SETBACKS** 30 feet from building.  
30 feet from curb.

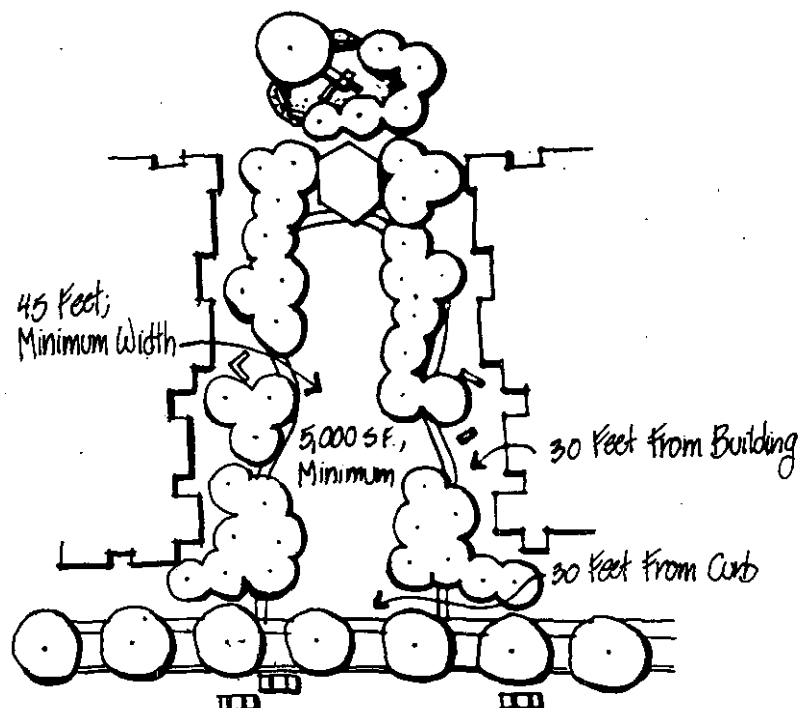
Setbacks may be reduced in multi-family and townhouse communities provided that other measures, such as landscaping and fencing, are used as necessary to achieve compatibility.

**SCREENING/LANDSCAPING** Use landscaping to define the area. Consideration should be given to maintenance requirements as well as compatibility with the surrounding landscape.

**DRAINAGE** Positive, slope 2 - 5%.

### SUPPLY VALUES

Tots	Children	Teens	Adults	Seniors
3	4	4	10	1



## 6. VOLLEYBALL COURT

**DEFINITION** A level grassy or properly designed sand area with pole and net for volleyball.

**DIMENSIONS** 42 x 60 feet clear playing area.

**POSSIBLE ACTIVITIES** Volleyball and Croquet.

**SETBACKS** 50 feet from building.  
30 feet from curb.

Setbacks may be reduced in multi-family communities provided that other measures, such as landscaping and fencing, are used as necessary to achieve compatibility.

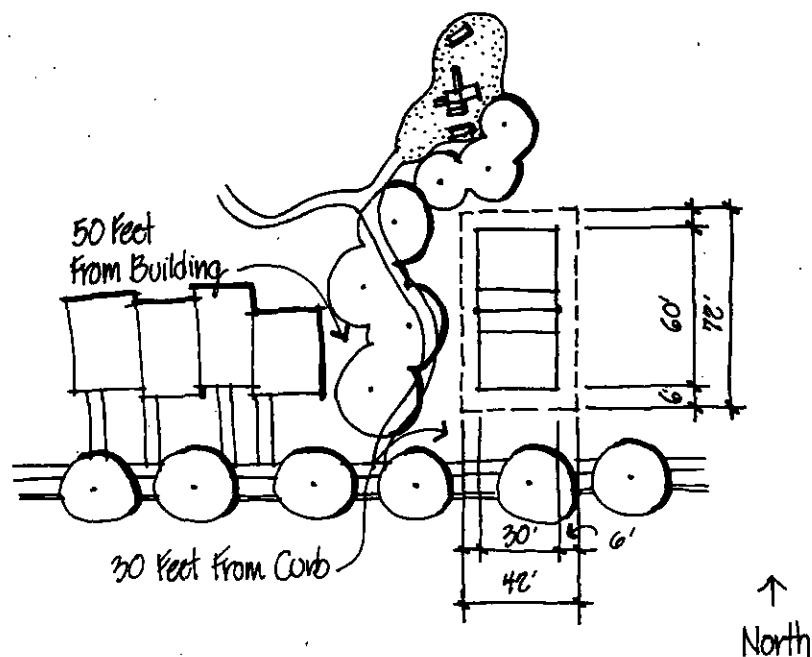
**SCREENING/LANDSCAPING** Use landscaping to define the area. Consideration should be given to maintenance requirements as well as compatibility with the surrounding landscape.

**ORIENTATION** Preferably North-South.

**DRAINAGE** Positive, slope 2 - 5%.

### SUPPLY VALUES

Tots	Children	Teens	Adults	Seniors
2	2	3	8	1



## 7A. BASKETBALL/ MULTIPURPOSE (MP) COURT

**DEFINITION** Paved full court for basketball and several other activities; includes 2 basketball standards.

**DIMENSIONS** 56 x 92 feet for full court.

**POSSIBLE ACTIVITIES** Basketball, Tricycling, Skateboarding, Rollerskating, and Hopscotch.

**SETBACKS** 50 feet from building.  
30 feet from curb.

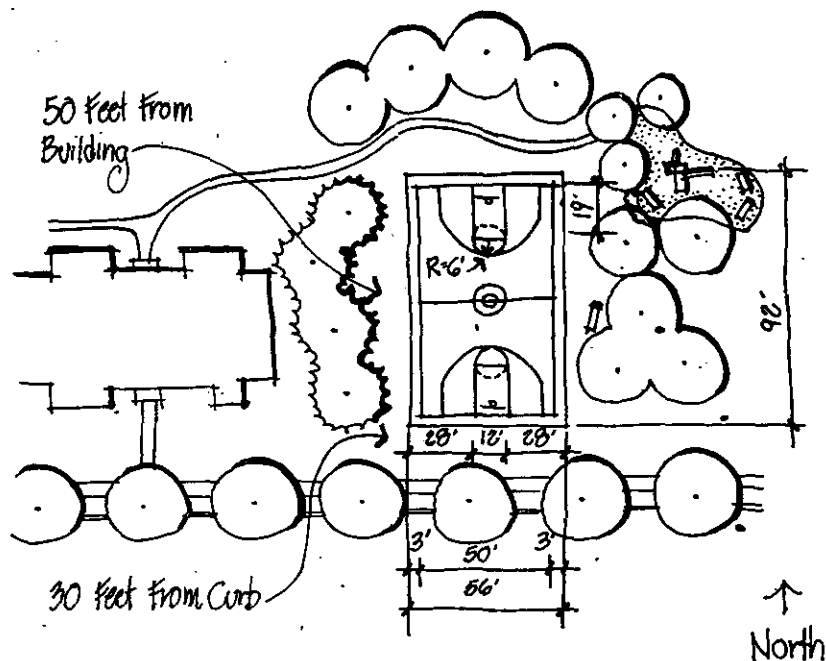
**SCREENING/LANDSCAPING** Use landscaping to define the area. Consideration should be given to maintenance requirements as well as compatibility with the surrounding landscape.

**ORIENTATION** Preferably North-South.

**DRAINAGE** Maximum 1% slope in any direction.

### SUPPLY VALUES

Tots	Children	Teens	Adults	Seniors
3	10	15	10	2.5



## 7B. HALF BASKETBALL/MPCOURT I (CROSS COURT)

**DEFINITION** Paved 1/2 court for basketball and several other activities; includes 2 basketball standards.

**DIMENSIONS** 56 x 50 feet for 1/2 court.

**POSSIBLE ACTIVITIES** Basketball, Tricycling, Skateboarding, Rollerskating, and Hopscotch.

**SETBACKS** 50 feet from building.  
30 feet from curb.

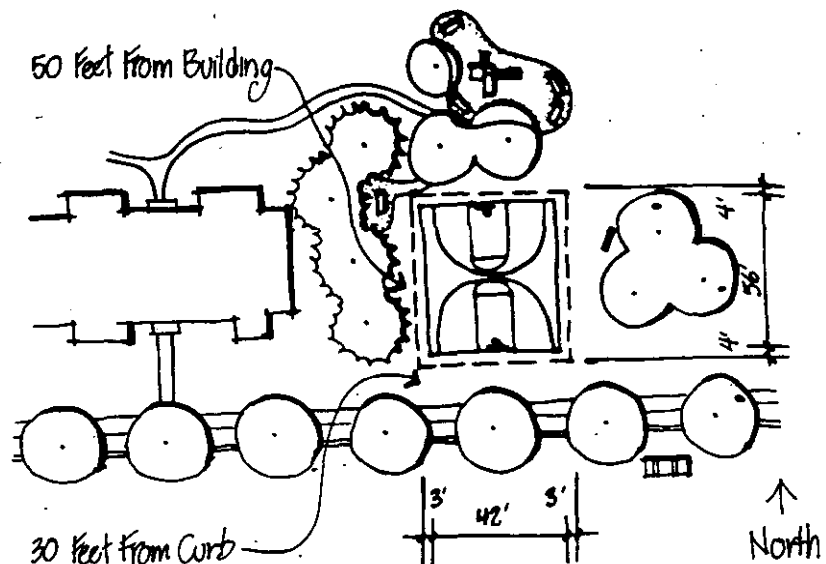
**SCREENING/LANDSCAPING** Use evergreen and shade trees to define the area.

**ORIENTATION** Preferably North-South.

**DRAINAGE** Maximum 1% slope in any direction.

### SUPPLY VALUES

Tots	Children	Teens	Adults	Seniors
2	5	7	8	1



## 7C. HALF BASKETBALL/MPCOURT II

**DEFINITION** Paved 1/2 court for basketball and several other activities; includes 1 basketball standard.

**DIMENSIONS** 56 x 50 feet for half court.

**POSSIBLE ACTIVITIES** Basketball, Tricycling, Skateboarding, Rollerskating, and Hopscotch.

**SETBACKS** 50 feet from building.  
30 feet from curb.

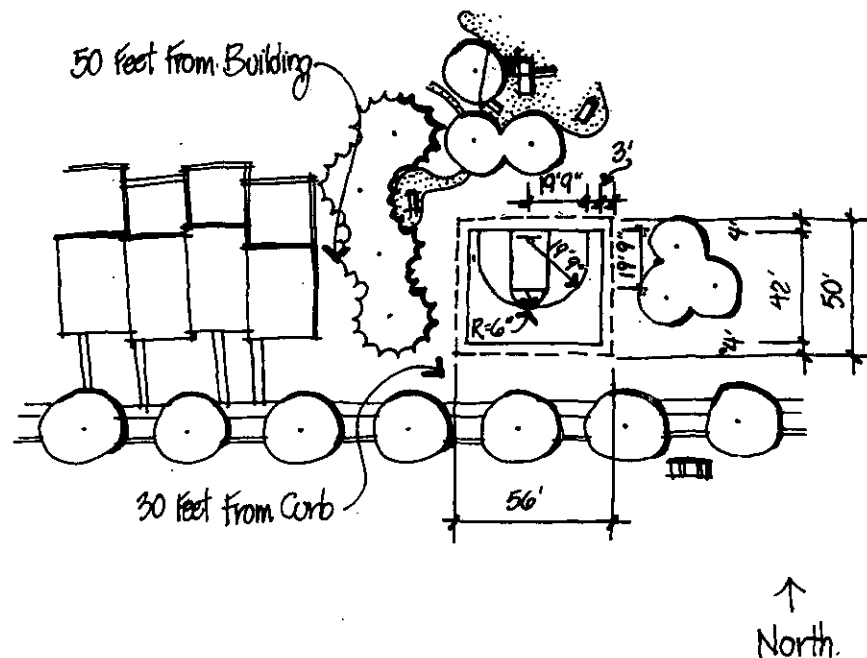
**SCREENING/LANDSCAPING** Use evergreen and shade trees to define the area.

**ORIENTATION** Preferably North-South.

**DRAINAGE** Maximum 1% slope in any direction.

### SUPPLY VALUES

Tots	Children	Teens	Adults	Seniors
2	5	4	5	1





## 8. TENNIS COURT

**DEFINITION** Regulation tennis court.

**DIMENSIONS** 124 x 54 feet.

**ACTIVITIES** Tennis.

**SETBACKS** 50 feet from building.  
30 feet from curb.

**SCREENING/LANDSCAPING** Use evergreen and shade trees to define the area.

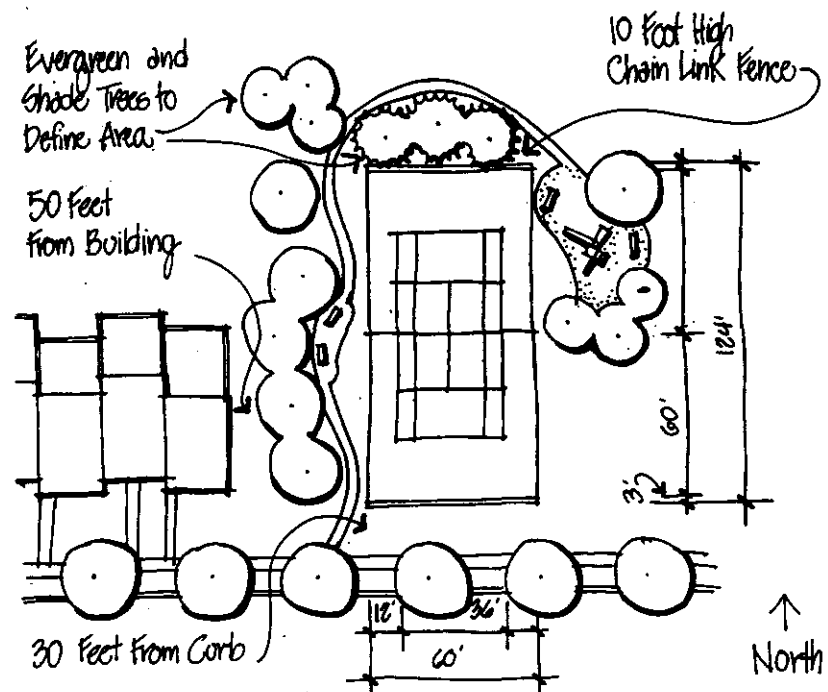
**ORIENTATION** Preferably North-South.

**DRAINAGE** Maximum 1% slope in any direction.

**SPECIALS** Construct 10-foot high chain link fence one foot from outer edge of court.

### SUPPLY VALUES

Tots	Children	Teens	Adults	Seniors
0	1.5	10.5	24	1



## 9. ONE WALL HANDBALL

**DEFINITION** One wall handball court on concrete or asphalt surface with appropriate wall.

**DIMENSIONS** Court ..... 20 x 34 ft.  
Wall ..... 16 ft. high, 24 ft. long

**ACTIVITIES** Handball.

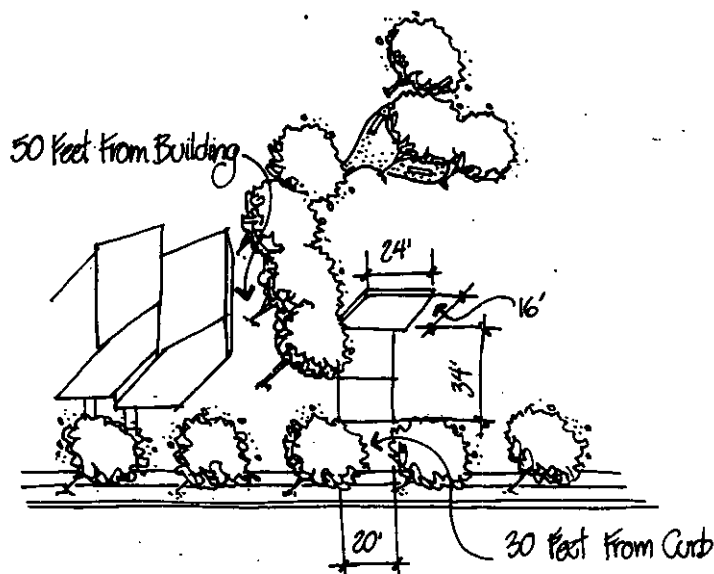
**SETBACKS** 50 feet from building.  
30 feet from curb.

**DRAINAGE** Slight slope away from wall.

**WALL DETAILS** Wood wall - thoroughly braced; apply facial boards.  
Concrete wall - 8" to 12" thick, heavily reinforced, supported on 4 ft. deep foundation.

### SUPPLY VALUES

Tots	Children	Teens	Adults	Seniors
0	1.5	2	4	1



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**10. INDOOR  
RACQUETBALL/SQUASH**

**DEFINITION** An indoor court for two players.

**DIMENSIONS** Court ..... 20 x 34 ft.  
Wall ..... 6 ft. high, 24 ft. long

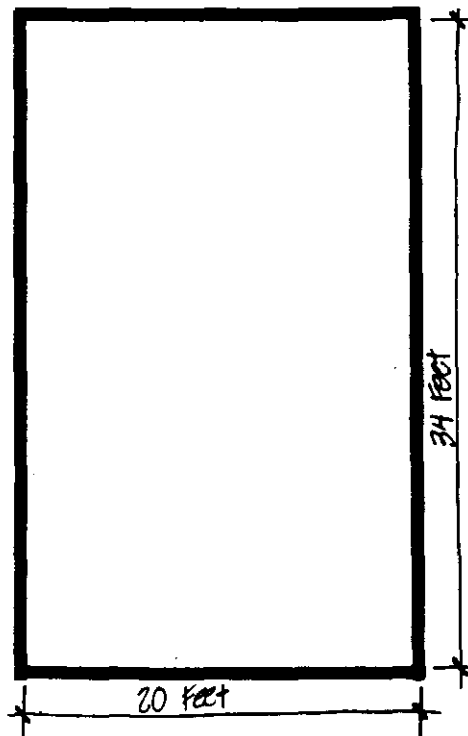
**ACTIVITIES** Racquetball, Squash.

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**SUPPLY VALUES**

Tots	Children	Teens	Adults	Seniors
0	1.5	4	8	1

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# 11. HORSESHOES

**DEFINITION** A level space with iron stakes driven into the ground 40 feet apart.

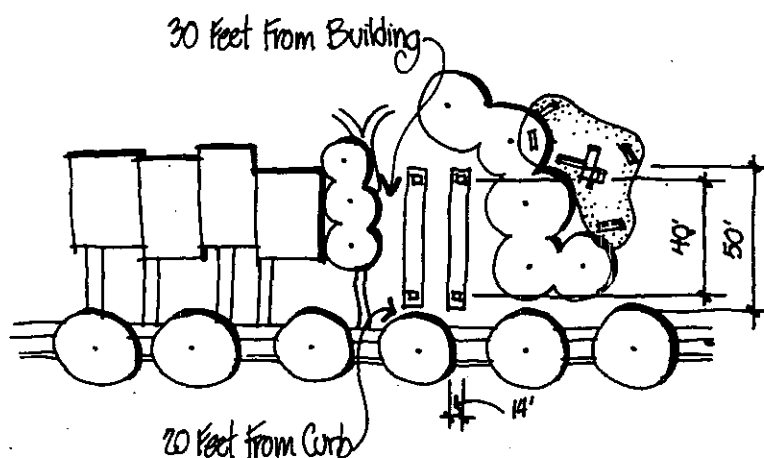
**DIMENSIONS** 50 x 14 feet.

**ACTIVITIES** Horseshoes.

**SETBACKS** 30 feet from dwelling.  
20 feet from curb.

## SUPPLY VALUES

Tots	Children	Teens	Adults	Seniors
0	2	2	4	3



12A. SOCCER FIELD  
(REGULATION)

12B. SOCCER FIELD  
(JUNIOR)

**DEFINITION** Regulation or practice soccer field on turf grass surface with two permanent goals.

**AREA REGULATION** ..... 225 x 360 ft.

**JUNIOR** ..... 150 x 240 ft.

**POSSIBLE ACTIVITIES** Soccer, Lacrosse in regulation field, some open play area activities.

**SETBACKS** 100 feet from building.  
40 feet from curb.

**SCREENING/LANDSCAPING** Shade for spectator seating area.

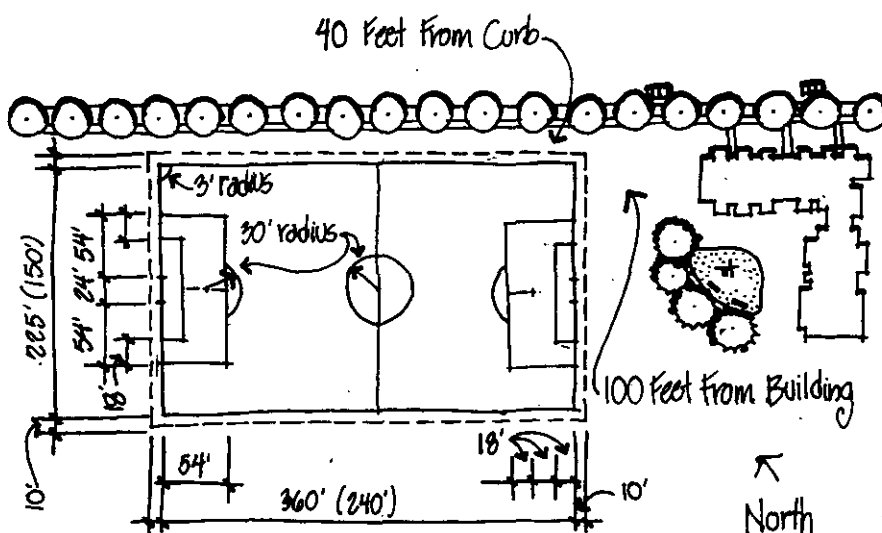
**ORIENTATION** Preferably Northwest-Southeast.

**DRAINAGE** Central longitudinal crown with 1.5% slope to sidelines.

**OTHER FEATURES** Spectator seating on slopes or bleachers should be considered.

## SUPPLY VALUES

	Tots	Children	Teens	Adults	Seniors
REGULATION	2	15	20	40	2
JUNIOR	2	15	15	30	2



### 13A. SOFTBALL FIELD (REGULATION)

### 13B. SOFTBALL FIELD (JUNIOR)

**DEFINITION** Regulation or practice softball field on turf grass surface.

**AREA** REGULATION ..... 2 acres  
JUNIOR ..... 1.5 acres

**POSSIBLE ACTIVITIES** Softball, some open play area activities.

**SETBACKS** 100 feet from building.  
40 feet from curb.

**SCREENING/LANDSCAPING** Shade for spectator seating.

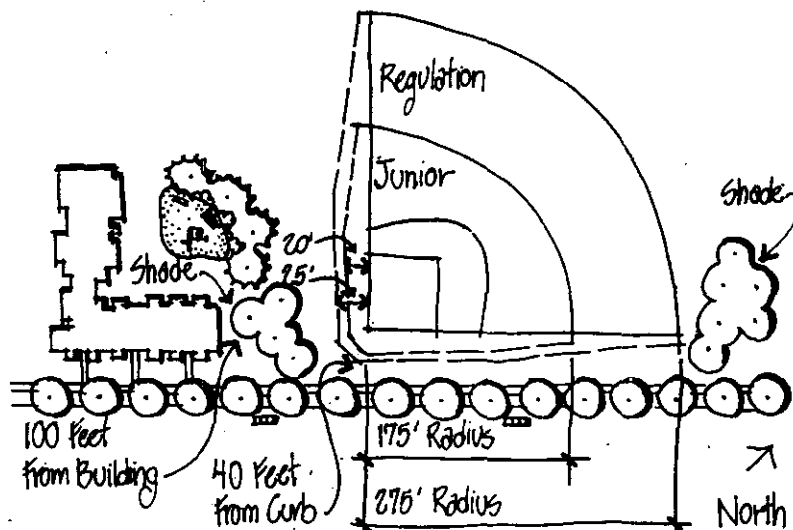
**ORIENTATION** Home plate to second base directly north-south with home plate facing north.

**DRAINAGE** 1.25% to 2% slopes.

**OTHER FEATURES** Spectator seating on slopes or bleachers should be considered.

#### SUPPLY VALUES

	Tots	Children	Teens	Adults	Seniors
13A. REGULATION	2	15	20	40	2
13B. JUNIOR	2	15	15	30	2



# 14A. BASEBALL FIELD (REGULATION)

# 14B. BASEBALL FIELD (JUNIOR)

**DEFINITION** Regulation baseball field on turf grass surface with back stops.

**AREA** REGULATION ..... 3 acres  
 JUNIOR/Pony League ..... 2.5 acres  
 JUNIOR/Little League ..... 2 acres

**POSSIBLE ACTIVITIES** Baseball, Softball, some open play area activities.

**SETBACKS** 100 feet from building.  
 40 feet from curb.

**SCREENING/LANDSCAPING** Shade for spectators.

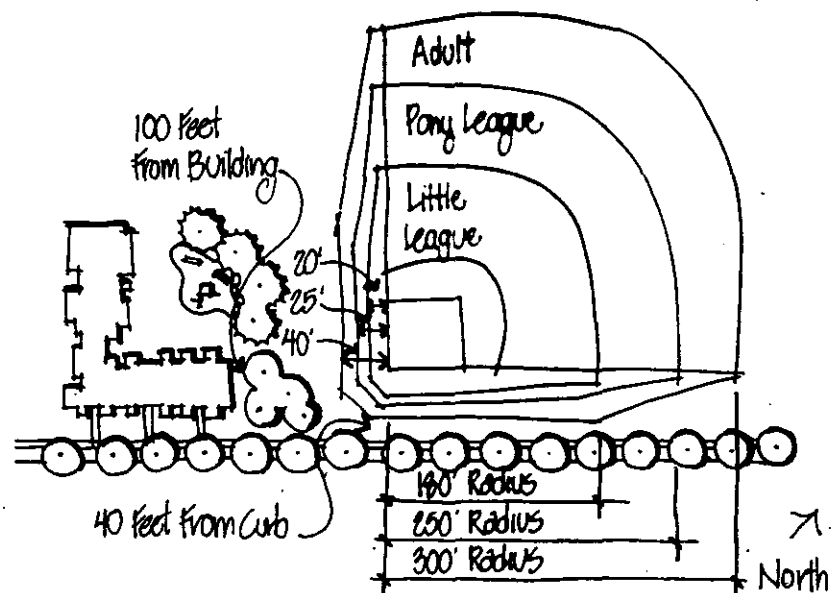
**ORIENTATION** Preferably Northwest-Southeast.

**DRAINAGE** 1.25% to 2% slopes.

**OTHER FEATURES** Spectator seating on slopes or bleachers should be considered.

## SUPPLY VALUES

	Tots	Children	Teens	Adults	Seniors
REGULATION	2	15	20	40	2
JUNIOR	2	15	15	30	2



# 15A. FOOTBALL FIELD (REGULATION)

# 15B. FOOTBALL FIELD (JUNIOR)

**DEFINITION** Regulation football field on turf grass surface with two semi-permanent goals.

**AREA** REGULATION ..... 372 x 172 ft  
JUNIOR ..... 312 x 132 ft

**POSSIBLE ACTIVITIES** Football, some open play area activities.

**SETBACKS** 100 feet from building.  
40 feet from street.

**SCREENING/LANDSCAPING** Shade for spectators.

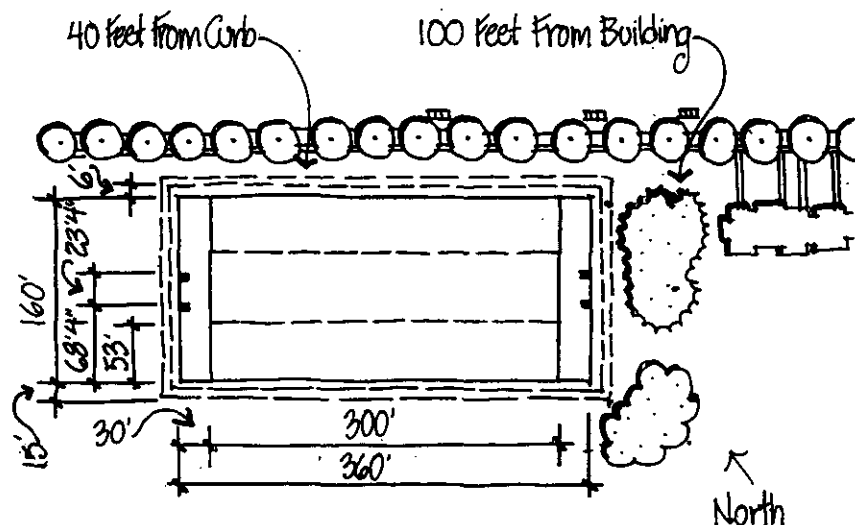
**ORIENTATION** Preferably Northwest-Southeast.

**DRAINAGE** Minimum 2% slope.

**OTHER FEATURES** Spectator seating on slopes or bleachers should be considered.

## SUPPLY VALUES

	Tots	Children	Teens	Adults	Seniors
REGULATION	2	15	20	40	2
JUNIOR	2	15	15	30	2





## 20. BIKE SYSTEM

**DEFINITION** A coherent and continuous on-site system consisting of bike paths, bike lanes, and bike routes that provides safe bike access and recreational opportunities for the community.

**DESIGN CRITERIA** The system should provide safe bike linkages to neighborhood destinations, such as public transportation and public facilities, and to the countywide bike network.

The system should provide recreational biking opportunities for the whole community. A minimum length of one mile, which may include off-site recreation facilities, should be provided.

The network should include bikeways through natural areas wherever possible.

Resting areas should be provided in longer systems.

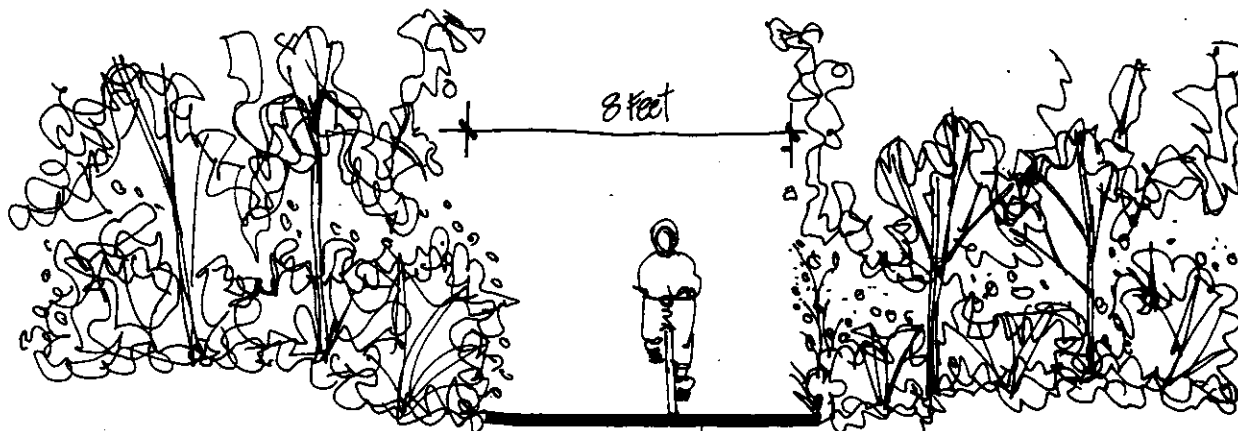
### MINIMUM WIDTHS:

BIKE PATH/One Way .....	6 ft.
BIKE PATH/Two-Way .....	8 ft.
BIKE LANE/One Way .....	5 ft.
HIKER/BIKER TRAIL .....	8 ft.

**DESIGN SPECIFICATIONS** Must comply with the Master Plan for Bikeways. Must comply with path and trail design specifications (Section IV - B 1 and 2). Surfaces besides asphalt will be considered.

### SUPPLY VALUES

Tots	Children	Teens	Adults	Seniors
0.05×D1	0.10×D2	0.15×D3	0.15×D4	0.10×D5



## 21. PEDESTRIAN SYSTEM

**DEFINITION** A coherent and continuous network of sidewalks and paths that provides safe pedestrian linkages to major destinations and recreational opportunities for the community.

**POSSIBLE ACTIVITIES** Walking, Jogging, and Sidewalk Play.

**DESIGN CRITERIA** The network should provide safe pedestrian linkages to neighborhood destinations, such as public transportation and public facilities.

The network should provide recreational opportunities for the proposed community.

Resting areas should be provided.

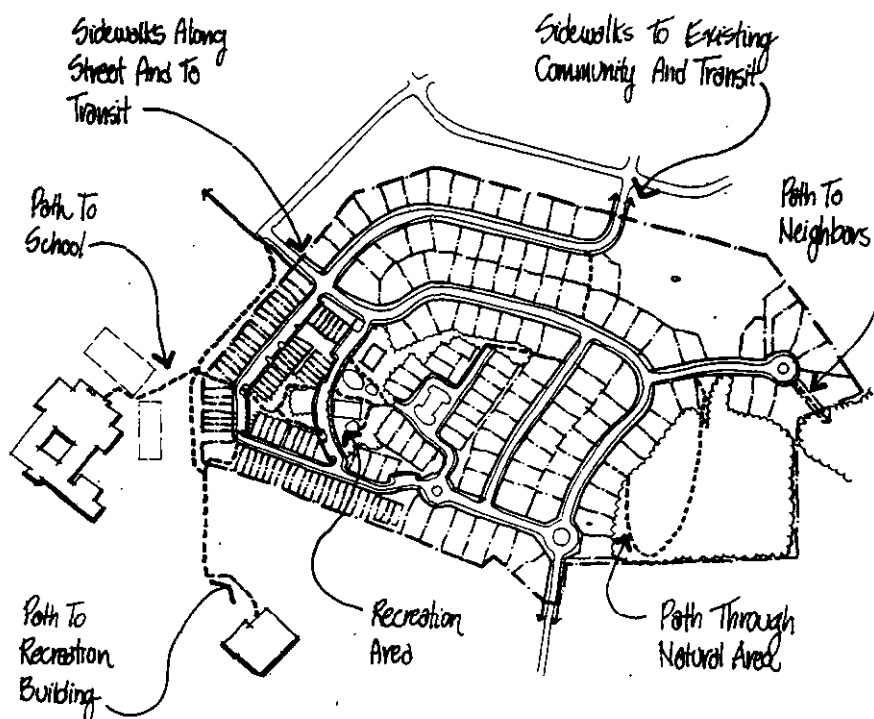
Reasonable handicap access should be provided.

The minimum width for a pedestrian path is 5 feet. This width may be reduced in environmentally sensitive areas.

**DESIGN SPECIFICATIONS** Must comply with path and trail design specifications (Section IV - B).

### SUPPLY VALUES

Tots	Children	Teens	Adults	Seniors
0.10×D1	0.20×D2	0.20×D3	0.45×D4	0.45×D5



## 22. TRAILS THROUGH NATURAL AREAS

**DEFINITION** Paths that provide access and opportunities to interact with nature.

**POSSIBLE ACTIVITIES** Walking, Hiking, and Nature Study.

**DESIGN CRITERIA** The paths should provide adequate access to natural features such as woodland, wetland, ponds, and creeks.

Resting areas should be provided where appropriate.

Must conform to the Maryland-National Capital Park Planning Commission/ Environmental Protection Department guidelines for environmental management and be designed to maximize protection and function of the natural features.

Pervious surfaces, such as crushed stone, are encouraged. The trail should be designed to minimize erosion.

**DESIGN SPECIFICATIONS** Must comply with path and trail design specifications (Section IV - B).

### SUPPLY VALUES

Tots	Children	Teens	Adults	Seniors
0.05×D1	0.10×D2	0.15×D3	0.15×D4	0.15×D5



## 23. NATURAL AREAS (NO PATHS)

**DEFINITION** Substantial areas of natural reserve where access is possible without the provision of formal paths.

**POSSIBLE ACTIVITIES** Hiking and Nature Study.

**DESIGN CRITERIA** Natural areas are woodlands, wetlands, ponds, and marshes.

These areas should be accessible from a public street or common land.

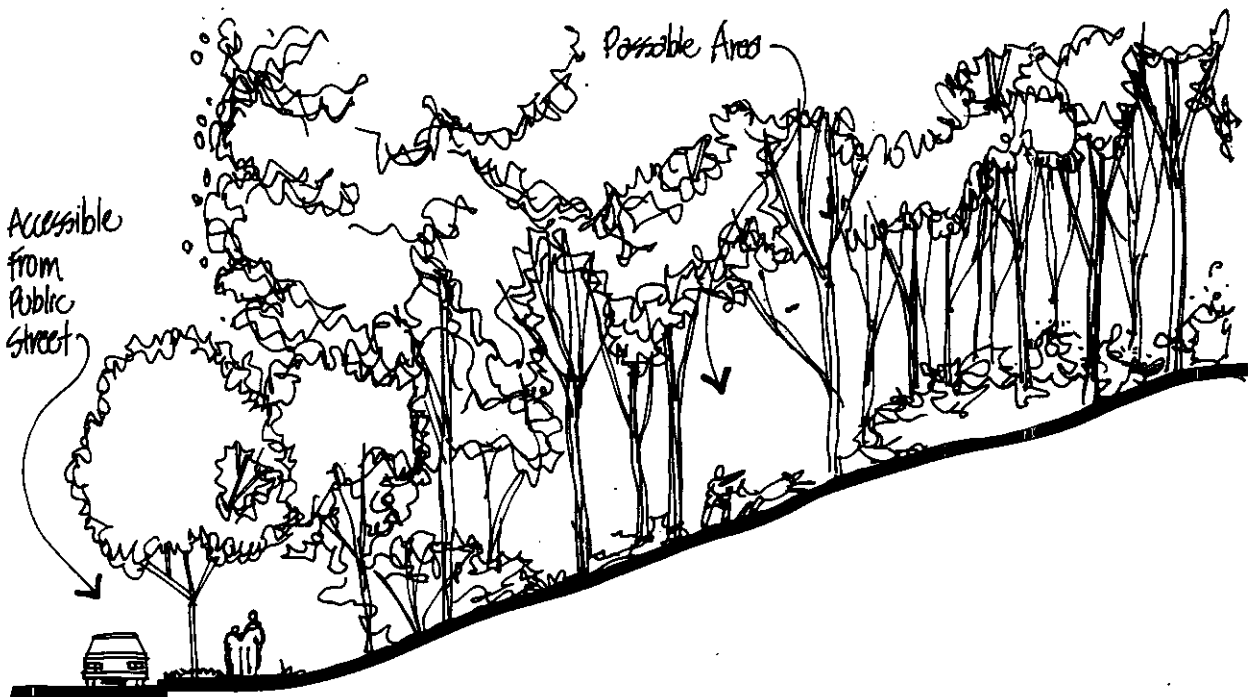
The natural area should have a minimum width of 50 feet per location and a minimum total area of 200 square feet per unit.

The area should be cleared of man-made debris.

Portions of the area should be passable and walkable.

### SUPPLY VALUES

Tots	Children	Teens	Adults	Seniors
0.0×D1	0.05×D2	0.10×D3	0.10×D4	0.05×D5



## 24A. SWIMMING POOL

**DEFINITION** Swimming pool for the use of the residents; includes lap lanes and a deck.

**POSSIBLE ACTIVITIES** Recreational Swimming and Lap Swimming.

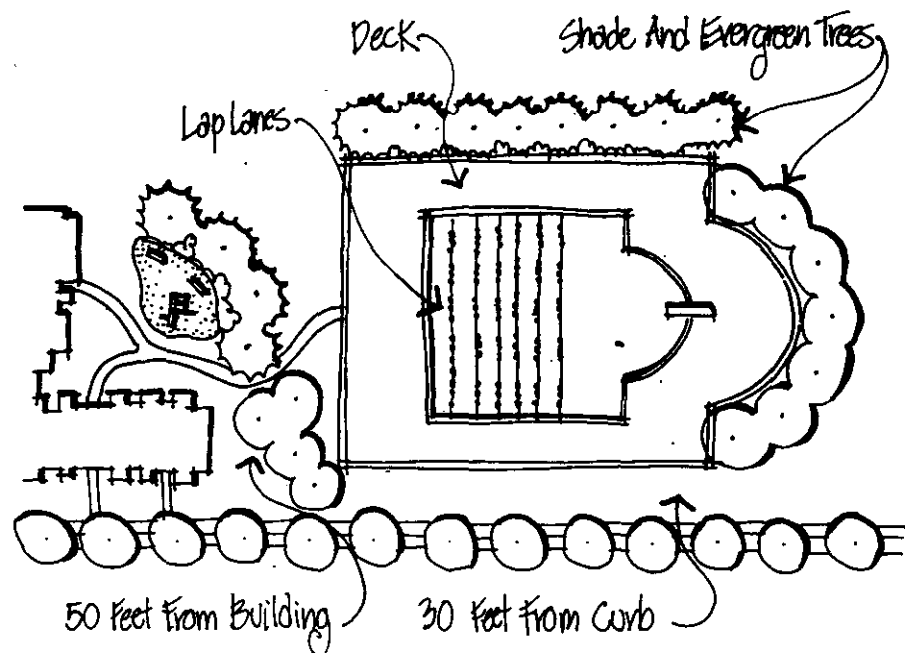
**SETBACKS** Deck of pool: 50 feet from a residential building.  
Deck of pool: 30 feet from curb.

**SCREENING/LANDSCAPING** Shade and evergreen trees for definition of pool area; shade trees in grass area.

**DESIGN SPECIFICATIONS** Must conform to Montgomery County Health Department standards.

### SUPPLY VALUES

Tots	Children	Teens	Adults	Seniors
0.05×D1	0.20×D2	0.20×D3	0.25×D4	0.15×D5



## 24B. WADING POOL

**DEFINITION** Wading pool for the use of small children in the proposed community; includes a deck.

**POSSIBLE ACTIVITIES** Water Play.

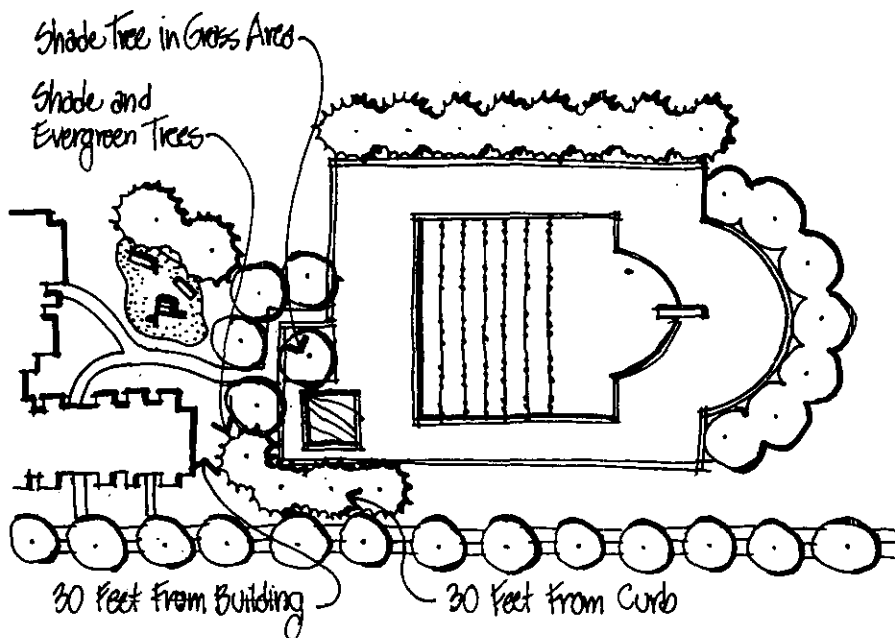
**SETBACKS** 35 feet from a residential building.  
30 feet from curb.

**SCREENING/LANDSCAPING** Shade and evergreen trees for definition of pool area; shade trees in grass area.

**DESIGN SPECIFICATIONS** Must conform to Montgomery County Health Department standards.

### SUPPLY VALUES

Tots	Children	Teens	Adults	Seniors
0.15×D1	0.05×D2	0.00×D3	0.05×D4	0.05×D5



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## 25. INDOOR SWIMMING POOL

**DEFINITION** Swimming pool for the year round use of the residents; includes lap lanes.

**POSSIBLE ACTIVITIES** Recreational Swimming and Lap Swimming.

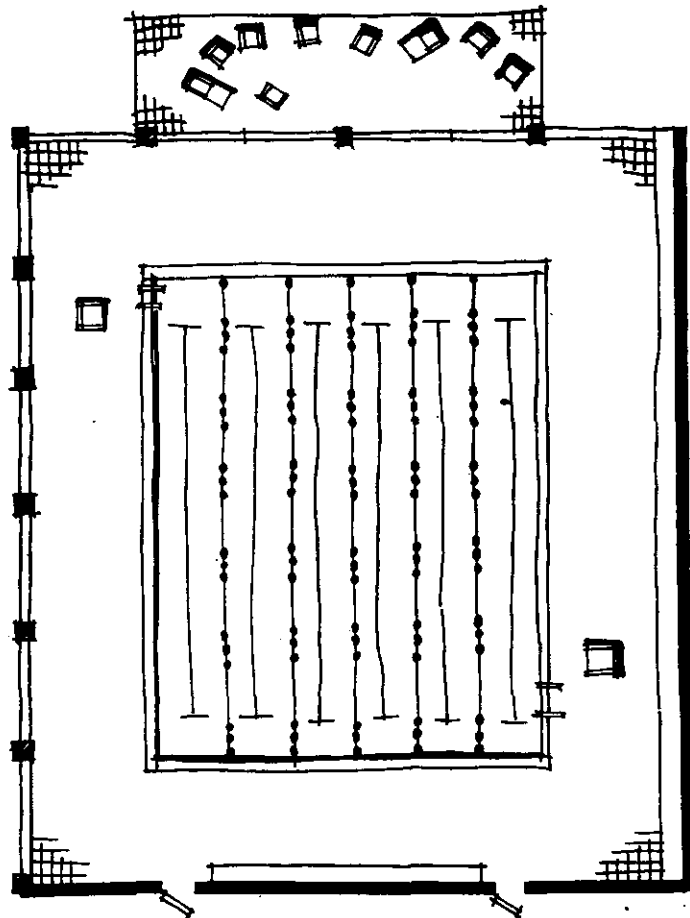
**DESIGN SPECIFICATIONS** Must conform to Montgomery County Health Department standards.

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### SUPPLY VALUES

Tots	Children	Teens	Adults	Seniors
0.10×D1	0.20×D2	0.20×D3	0.30×D4	0.40×D5

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## 26A. INDOOR COMMUNITY SPACE

**DEFINITION** A multipurpose facility serving the recreational needs of the community; may include a multipurpose/meeting room, game room, craft or club room, party room, pantry, restrooms, office.

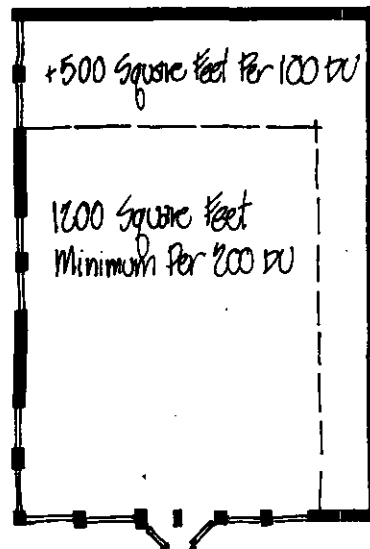
**AREA** Must have a threshold area of 1,200 sf. to accommodate a maximum of 200 dwelling units.

Increments of 500 sf. must be added for each additional 100 dwelling units.

**POSSIBLE ACTIVITIES** Community Gatherings, Club Meetings, Hobby Activities, and Parties.

### SUPPLY VALUES

Tots	Children	Teens	Adults	Seniors
0.10×D1	0.15×D2	0.30×D3	0.30×D4	0.40×D5





## 26B. INDOOR EXERCISE ROOM

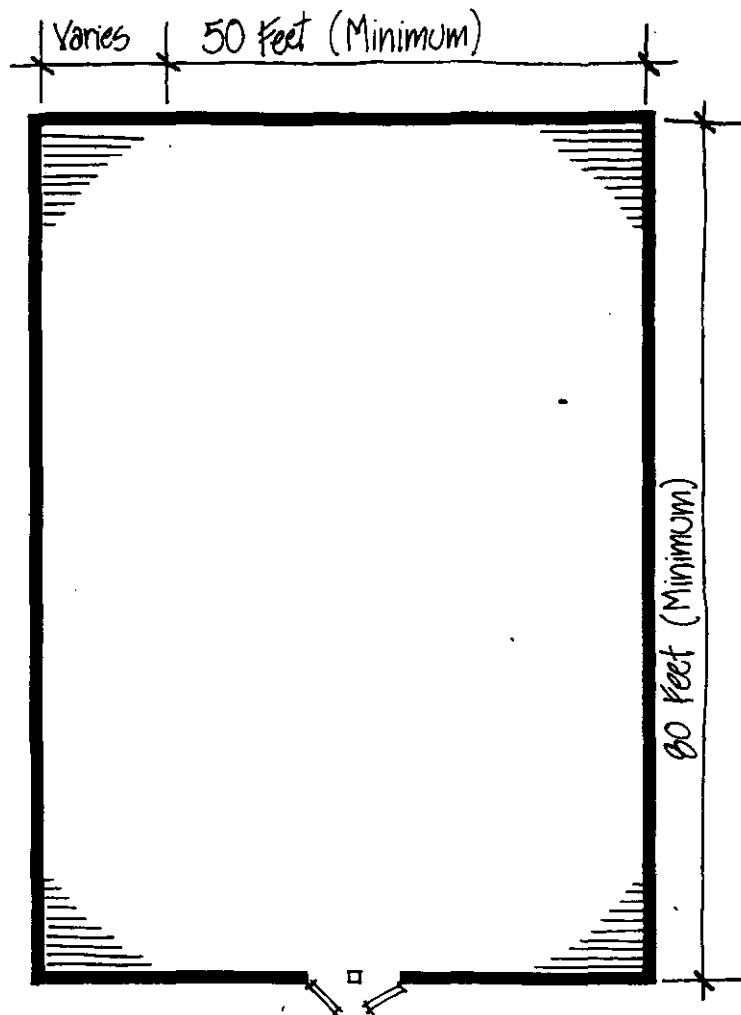
**DEFINITION** A small gymnasium sized to accommodate the proposed community.

**DIMENSIONS AREA** Approximately 50 x 80 feet minimum to accommodate a basketball court.

**POSSIBLE ACTIVITIES** Exercise, Basketball, Volleyball, and Aerobic Classes.

### SUPPLY VALUES

Tots	Children	Teens	Adults	Seniors
0.10xD1	0.15xD2	0.30xD3	0.30xD4	0.40xD5



## 27. INDOOR FITNESS FACILITY

**DEFINITION** An indoor exercise facility adequately designed to accommodate the proposed project.

**POSSIBLE ACTIVITIES** Exercise.

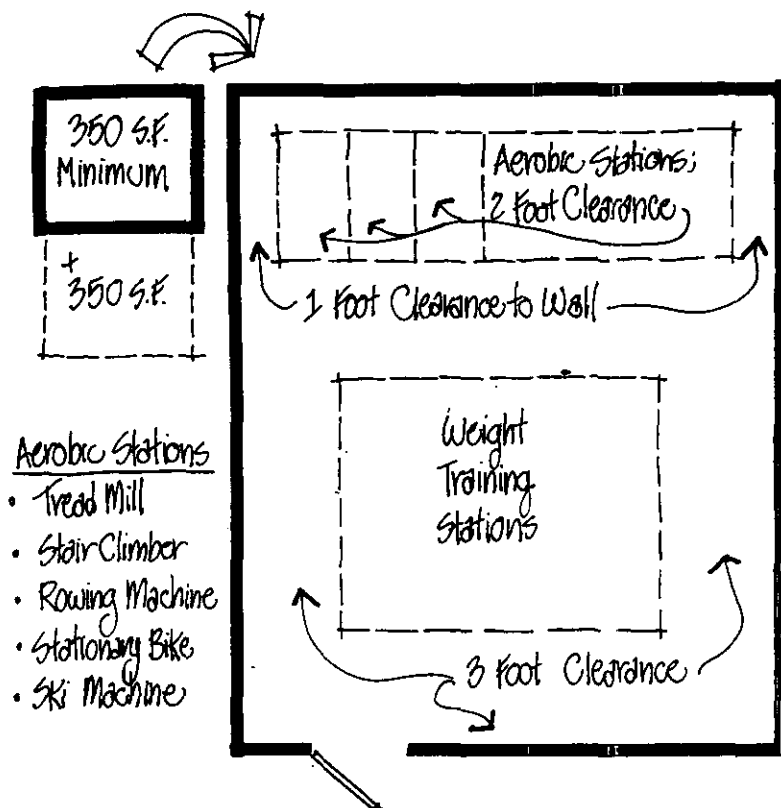
**DESIGN CRITERIA** Minimum standards for increments of 350 units:

- Six weight training stations and 3 aerobic stations.
- Minimum area: 350 sf.

Must have adequate light and ventilation.

### SUPPLY VALUES

Tots	Children	Teens	Adults	Seniors
0.00xD1	0.10xD2	0.10xD3	0.20xD4	0.15xD5



## 28. COMMUNITY GARDEN

**DEFINITION** Garden plots for the use of the residents of the proposed project.

**AREA** Minimum area - 1,000 sf., 25 sf. per unit.

**POSSIBLE ACTIVITIES** Gardening.

**SETBACKS** 10 feet from building.  
20 feet from curb.  
Compatibility should be achieved.

**SCREENING/LANDSCAPING** An attractive landscape setting should be provided.

**ORIENTATION** Full sun.

**DRAINAGE** Water hookup should be provided.

**OTHER FEATURES** A tool shed should be considered for large plots.

### SUPPLY VALUES

Tots	Children	Teens	Adults	Seniors
0.10×D1	0.10×D2	0.10×D3	0.20×D4	0.25×D5





# SPECIFICATIONS

## PLAY EQUIPMENT SPECIFICATIONS

Equipment should be designed to provide a wide range of behavioral options for children of varying abilities. Separate areas for very young children (Tot Lots) should be provided.

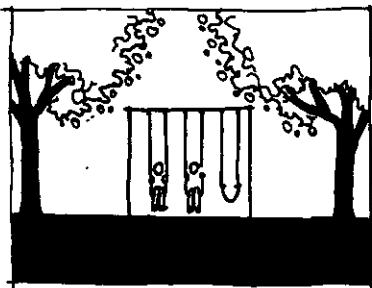
The following are desirable activities in the playground:

- Climbing, Swinging, Bouncing, Balancing, Jumping, Crawling, Hopping, Skipping, Creeping, Sliding, Rolling Lifting, Pushing, Pulling, Knee Walking, Swinging, Hand-Over- Hand, Hanging By Arms, Twirling/Spinning.

## GENERAL SAFETY GUIDELINES

All playgrounds should comply with the most current Consumer Product Safety Commission (CPSC) guidelines. Playgrounds must comply with the following safety guidelines:

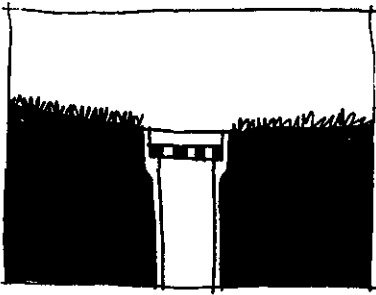
1. Clear space at end of slides should be equal to the length of the slide or 12 feet in the case of slides over four feet in height. Clear space on sides of slides shall be six feet on each side.
2. Swing, to-fro: Minimum clear space should be equal to two times the height of the swing in the direction of each motion.
3. All play equipment should have a minimum of six feet clear space from adjacent structures, trees, framing, and other pieces of equipment.
4. Spring animals should have a minimum of a seven- foot radius of clear space.
5. Tot structures should not exceed 4-1/2 feet in height.
6. No deck for any age group should exceed 6-1/2 feet in height (except for slides with enclosed decks, which may be seven feet in height).
7. Minimum safety surfacing (clear wood chips - not tree trimmings) at least eight inches thick should be placed under all play equipment.
8. Swing units should not be attached to the main play structure.
9. No opening on any play structure or accessory shall be between four inches and ten inches. Openings in this range represent potential entrapment.
10. Vertical angles formed by adjacent surfaces on the boundary of an accessible opening should exceed 55 degrees, per CPSC



entrapment guidelines.

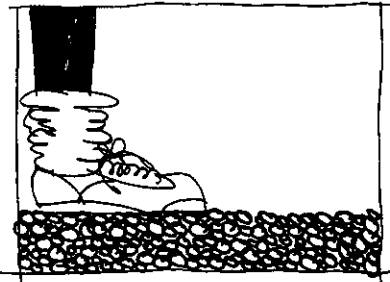
11. All nuts and bolts should be recessed.
12. Footings: The tops of playground equipment footings should be covered by four inches of compacted fill plus inches of fall-absorbing material.

### DRAINAGE



- Install positive drainage.
- The site should be practically level if loose material such as sand is to remain in place (unless there are effective retaining features). Locations under swings and at the end of slides (because they tend to become the lowest points) need the most active drainage.
- A subsurface drainage material (e.g. plastic drain material) connected to drain pipes with a filter cloth layer on top is recommended wherever needed.

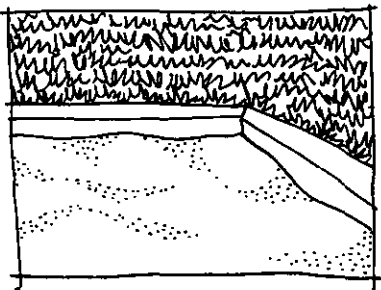
### SURFACE



The following are acceptable surfaces for the play equipment area:

1. **HARDWOOD CHIPS.** Clear wood chips (not tree trimmings) provide an acceptable surface for play equipment. Chips come in different sizes. The one- to three-inch chips work best. Engineered systems that meet CPSC standards are encouraged. Hardwood chips are the best choice because they last longest. Maintain a minimum of eight inches of chips in equipment areas, and a minimum of six inches in non-equipment areas.
2. **PEA GRAVEL.** Pebbles must be round in shape and as uniform in size as possible. A diameter of 1/8" - 3/8" must be maintained. Must meet CPSC standards.
3. **OTHER SURFACES.** Other surfaces, such as sand or synthetic material, may be used if CPSC standards regarding these materials are adhered to.

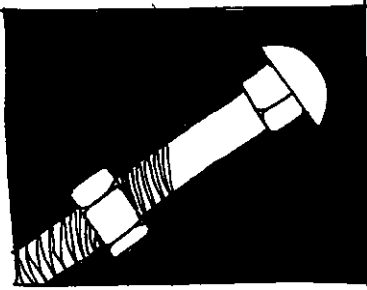
### RETAINERS AND EDGE DETAILING



- **BORDER SETBACK AND MATERIALS.** Edging, curbing, or other containment is required around play areas filled with loose surface materials.
- **WOOD USED FOR THIS APPLICATION MUST BE TREATED FOR GROUND CONTACT.** Concrete edges should likewise have a wood cap to help reduce the possibility of broken glass. Provide adequate fall zones (as specified by supplier, for instance) around all play equipment. Pay special attention to the surface material retainer for visual impact and maintenance requirements.

- **HEIGHT DIFFERENTIAL.** The height of the surface material barrier should be determined by the following factors: the ability to retain loose material; the creation of a potential trip hazard; and the need to level an area to a one to three percent slope. Eight inches will normally contain all but intentionally thrown material.
- **TRANSITION ZONES AROUND EQUIPMENT AREAS.** The area around the surface material retainer, extending out about five feet, is an area where significant future maintenance will be needed. Material thrown out of the retainer will be deposited here and should be anticipated.

## HARDWARE

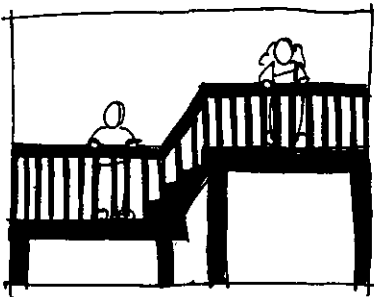


Determine that the fasteners used on play equipment are vandal-resistant and protrusion-free.

- **PROTRUSIONS.** The guidelines for protrusions established by the CPSC specified the maximum allowable protrusion. In no case should an object protrude more than half its diameter (e.g., a 1/2-inch bolt not more than 1/4 inch). If fasteners protrude, they shall have smoothly rounded corners.
- **MOVING JOINTS.** Moving joints are one of the most troublesome maintenance features on playgrounds. Bearings used, such as on roller slides, shall be sealed ball bearings. Other bearings shall have grease fittings and be sealed from weather with flexible rubberized boots or other bearings. All moving joints must be disassembled periodically to inspect for wear. As sealed joints cannot be disassembled, replacement records must be kept.

The manufacturer should supply all such joints with bearings, not simple metal-to-metal S hooks.

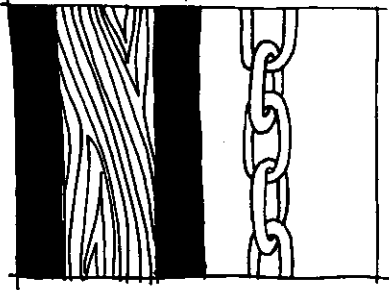
## ENCLOSURE



Enclosure is essential for safety, e.g., in a multi-deck structure where a high deck is adjacent to a low deck. Be certain that platform enclosures are at least 38 inches in height and present no entrapments or footholds for climbing. Roofs, if used, should be steep to discourage access.

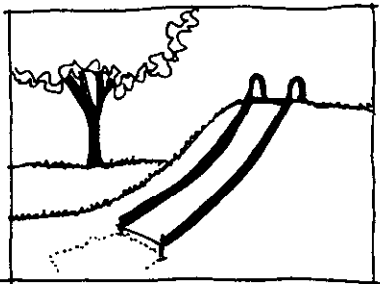
- Children with motor impediments may require additional railing details to support their movement through the play environment.

## MATERIALS



- **ATTACHMENT HARDWARE.** There shall be a minimum number of types of attaching hardware. All hardware shall be of a vandal-resistant type. Nails should never be used to secure play equipment.
- **POSTS.** Posts shall be steel, aluminum, pressure-treated wood, or plastic. All posts should be warranted for ten years. Support posts should be installed in concrete a minimum of 30 inches below ground surface. Concrete footing should be six to eight inches below ground surface (not wood chip surface).
- **DECKS.** Decks shall be retained without protruding hardware. Nails are not permitted. Metal decks are permissible if vinyl clad.
- **PLASTICS.** All plastics shall be high-grade polyethylene, polyvinyl chloride, or polycarbonate. They shall be stabilized against ultraviolet light degradation. They shall be self-extinguishing.
- **CHAIN AND CABLE.** All chain or cable on climbing structures shall be covered with rust-resistant material. Chains and joints shall be smooth and free of burrs.
- **WOOD TREATMENT.** All wood shall be treated with an acceptable wood preservative process that meets the standard of a .40 pounds CCA process. The manufacturer shall certify that wood treatment complies with the C - 17 standard of the American Wood Preservers Institute and is free of residual chemicals. Coating or sealer may also need to be applied.
- **CHECKS MAY NOT EXCEED 18 INCHES IN LENGTH OR 1/8 INCH IN WIDTH WHEN RECEIVED.** Wood may not check after installation for a period of one year to a check dimension of 24 inches in length and 3/16 inch in width.
- **METAL TREATMENT.** Touch up scratches in posts. Paint shall be supplied by the manufacturer. (Be aware that dents can affect the integrity of posts.)

## SLIDES

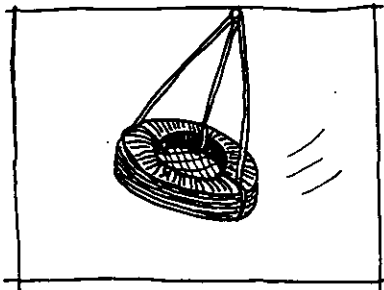


- **SLIDE HEIGHTS.** Slides should be less than 85 inches from the ground unless installed on slopes. If slide heights are greater than four feet, access decks should be properly enclosed with a 38-inch non-climbable enclosure and should include a double safety rail and a side rail a minimum of 2-1/2 inches above the slide surface.
- **SLIDE GRADIENT.** The average incline of the sliding surface shall not exceed 30 degrees. For accessibility and integration, paired slides are preferable to wide slides.



- **SLIDE EXIT ZONES.** Slide exit zones should be a minimum of 16 inches long, with a height between 9 and 15 inches, on decks higher than four feet.
- **FREESTANDING SLIDES.** Freestanding slides should be avoided, unless the steps are fully enclosed. Check that the stairs are fully enclosed and not sand traps and, therefore, slip hazards.
- **SLIDE ENTRY AREA.** Ensure that slides have devices that provide transition security at their entrance and that such devices do not introduce new hazards.
- **SLIDE MATERIALS.** Stainless steel, while very durable, gets hot enough in the sun to cause second degree burns. To minimize this problem it is recommended that slides be installed pointing in a northerly direction. Alternatively, slides must be provided with adequate shading.
- **PLASTIC SLIDES SOLVE PROBLEMS OF HEAT AND SHARP EDGES OF STAINLESS STEEL.** Currently, high-density polyethylene slides solve the durability problem and add an element of permanent color. If they are not well-made, they can be light-sensitive and can be damaged by sand and by heavy objects being thrown against them.
- **USE ONE-PIECE STRAIN SLIDES.** Spiral slides should have lap joints rather than butt joints to avoid foreign objects being inserted into the chute area.

## SWINGS



- **SWING SEATS.** The only acceptable swing seats are the rubber belt type, the triple-hung auto tire, and the full bucket tot seat. All seats shall be spring steel reinforced to reduce vandalism and belt seats should not allow sharp edges to be exposed. Swing seats for special applications are allowed as long as they conform to the CPSC guidelines.

Handicap accessible swing seats must have a back and side support or a hole/indentation (as in a tire swing with a cloth or webbed bottom) for the child's backside.

- **ISOLATION AND TRAFFIC FLOW BARRIERS.** Because swings can act as battering rams and small children commonly walk into the swing use zone, swings should be isolated from other play equipment. They should not be combined with multi-play structures.
- **DISTANCE BETWEEN SWINGS (AND BETWEEN SUPPORT BEAMS) SHOULD BE A MINIMUM OF 24 INCHES.**
- **SWING SETBACKS.** The minimum setback requirement for swings is two times the height of the swing beam from any edge

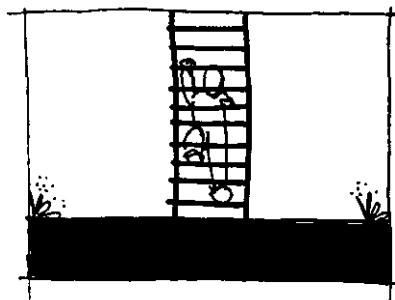
or obstacle. For tot and tire swings with low beams this distance can be reduced slightly.

- **TIRE SWINGS.** The swing hangers are one of the most critical hardware items used on playground equipment. Since tire swings move in all directions, they require a beam support span which is two times the swing length plus four feet. A twelve-foot span, common for this type of swing, would therefore be limited to 48 inch lengths of support chains and have a horizontal member height of 72 inches.

The beams should have universal joint bearings protected by a boot securely attached to the beam. Use thick chains and hardened steel S hooks that need special crimping tool.

The swings are easily made accessible by strapping webbing to the bottom or inserting plasticized canvas in the hole and bolting it in, thus creating a nest. Tires should drain.

## CLIMBERS

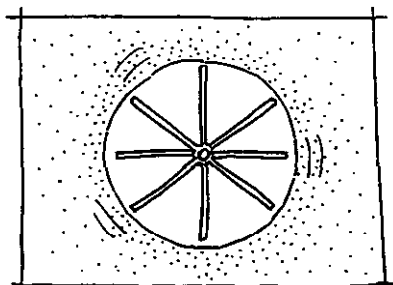


- **CLIMBER HEIGHTS.** The height of a climber should be based on four factors:
  1. Type and quality of the fall-absorbing surface
  2. Location
  3. User group
  4. Ability to maintain the equipment and surfacing

Rails and grips on climbers should be between 1 inch and 1-3/8 inches in diameter.

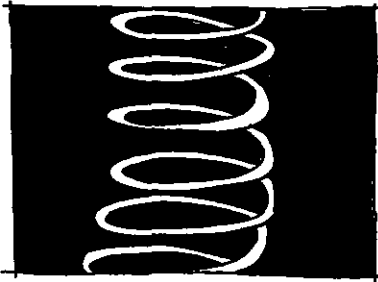
All freestanding climbers should be free-fall with openings four inches or less and ten inches or more.

## SPINNING EQUIPMENT



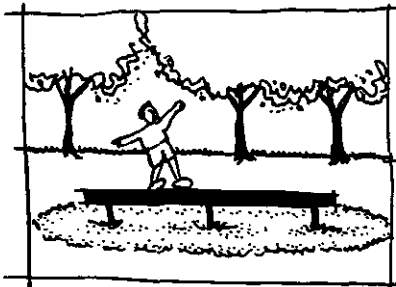
- **SURFACING OF SPINNING EQUIPMENT.** The use of whirls causes loose material to be pushed away all around their base, exposing the underside for possible entrapment. Be certain that rotating equipment is installed in such a manner that children cannot become trapped underneath.

### ROCKING/SPRING MOUNTED EQUIPMENT



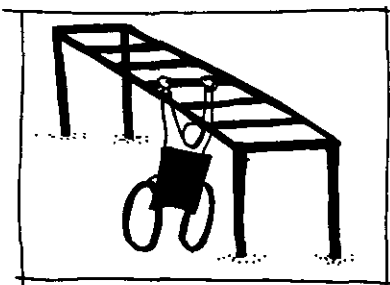
- If playground includes rocking spring-mounted animals they should be placed within play areas for tots.
- Rocking equipment should contain the child as much as possible. No high-spring animal head and hard, sharp-edged back supports are allowed.

### BALANCE EVENTS



- Balance surfaces should not be more than 12 inches above the ground.
- Swinging gates should not be included in playgrounds.
- Seesaws should not be included in playgrounds.
- Spring platforms should not be included in playgrounds.
- Spiral fire poles should not be included in playgrounds.

### UPPER BODY EVENTS

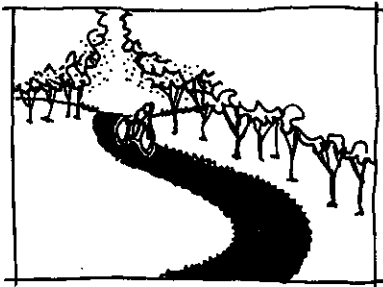


- Include upper body development events with graduated skill levels in each equipment setting.
- Upper body events should be used to link sections of the play environment and should be sized to challenge children of various abilities.
- Upper body development equipment should have appropriate, easily-used mount-dismount features.
- Height of Upper Body Events. Determining the proper height of upper body events is another area where the use of the equipment is in conflict with safety considerations. Horizontal ladders placed at a height of 78 inches may be used effectively by most children and are still low enough to be safe with appropriate safety surfacing.

Ladders can be lowered to make them accessible for young children and children in wheelchairs with upper body strength, but choosing an appropriate ground surface for both fall cushioning and wheelchair access is important.

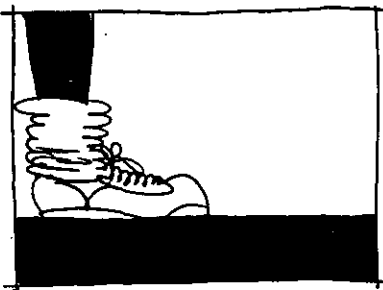
## PATHS AND TRAILS

Walking and bicycling are the most popular recreation activities of Montgomery County residents. An interconnected pathway system can provide recreation for all age groups including the elderly. They are also one of the few types of facilities that can be utilized by the handicapped. Pathways also provide accessibility and separate functionally different spaces; pathways can be a recreation and play facility in and of themselves.



- Provide a network of accessible routes to connect directly with entrances, extend across the site, and connect main centers of activity.
- Provide a variety of paths to accommodate hiking, triking and biking and interpretive activities, to meet the varied needs of children.
- Provide adequate resting places.
- Slopes for hiker/biker trails should not exceed 8% for lengths greater than 150 feet.
- Paths should be designed to have appropriate handicapped accessibility to the system. The maximum allowable slope for the handicap is 8.3% for a maximum distance of 30 feet. Zero to four percent is desirable for longer distances.
- Trails should have a minimum vertical clearance of eight feet. Tree branches should be pruned accordingly.
- Gratings for storm drainage should be placed off pathways. When they do occur, openings should be less than 1/2 inch and positioned so that bicycle tires will run perpendicular to the openings in the grate.

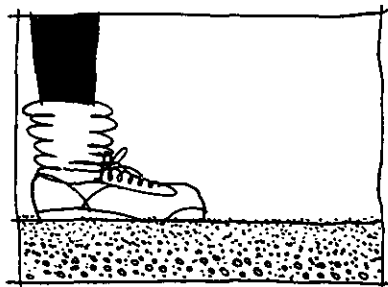
The following are acceptable surfaces for paths:



1. ASPHALT. Asphalt pathways may be used if they are carefully constructed and maintained. Typical construction should include:
  - A. Subgrade cleaned and cleared to a depth of six inches below finished grade, compacted to 95% density. A soil sterilizer may be utilized to control weed growth.
  - B. Three- to four-inch base of course aggregate, compacted to 95%.
  - C. Primer Coat.
  - D. Two- to three-inch surface course of hot mix bituminous concrete, compacted to 95% density. An epoxy finish coated with sand may be used to give a natural appearance and reduce softening problems in hot climates.
  - E. Slope to drain.

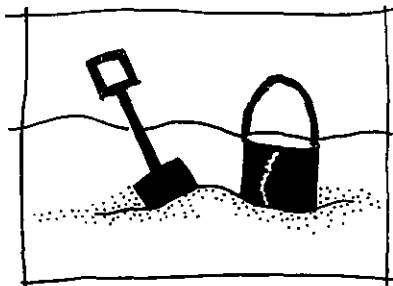
An alternate asphalt path section, consisting of 4 inch hot mix of bituminous concrete with subbase, may be used for pedestrian paths only.

Asphalt surfaces may become soft in very hot climates, causing difficulty for people in wheelchairs, and should not be used in very hot, sunny locations. Maintenance is important so that the pathway is not degraded by weeds, cracks, or erosions.



2. **CRUSHED STONE AND DECOMPOSED GRANITE.** Crushed stone can form an accessible surface if it is correctly designed and constructed, and adapted to regional climatic conditions.
  - A. Provide subgrade cleaned and cleared to a depth of six inches below finished grade, compacted to 95% density. The use of a soil sterilizer is recommended.
  - B. Provide four-inch base course, 3/4 inch crushed stone, compacted to 95% density. A binder of 2-3% Portland cement with water and gravel may be used.
  - C. Provide two-inch surfacing course of crusher fines, rolled and compacted to 95% density. Cement binder recommended.
  - D. Maintenance is essential to ensure a consistent surface.
3. **WOOD DECKING.** Wood decking may be used as a pathway and flooring surface for all levels of accessibility, providing joints meet the requirements of the level. Warpage and movement of the material must also be controlled.

## SAND SETTINGS



Sand, along with water, is one of the most popular play materials because of its softness and malleability. It has even more potential when combined with water. Sand can serve both as a play material and as a safety surface. Sand play areas should be explicitly designed.

A playground sand area should be like a beach - deep, wide, and near to the water. The sand area should be near a path and have a ramped approach so that children on wheels can get in easily and not fall in by mistake. Playing with hoses and buckets of water in sand is fun and easily managed if there is a supply of water nearby. If the sand area is at least four feet deep with good drainage below and no covering over it, it will be perfectly hygienic. Rain, air, and sunshine keep it so. If it is exposed to falling leaves in autumn or to cats and dogs at night-time, a fine meshed cover can be put over it when necessary.

### SPECIFICATIONS FOR SAND AREAS OR BOXES:

- Provide a balanced mix of particle sizes ranging from coarse sand (not more than 1.5 mm) to very fine.
- Pack well when moist.
- Sand must be well-washed, clean, and free of dirt, clay, silt oxides, iron, or other contaminants.
- Depth of sand in larger sand play areas should be between 12 and 24 inches.
- Shade in hot weather and sun in cool weather should be provided, with shelter from prevailing winds. All sand play areas should be sited to receive sun for part of the day for natural cleansing.
- Enclosures are necessary to keep sand in place and to thwart children from disturbing or running through the creative sand play of others. Enclosures provide a psychologically calm atmosphere. Shelf-like play surfaces can be designed in, along with places to sit or perch with peers. Enclosures must be made wide enough to support such activities.

If using timber, joints must be tight or filled; all timber cuts should have 2 coats of wood treatment solution brushed on.

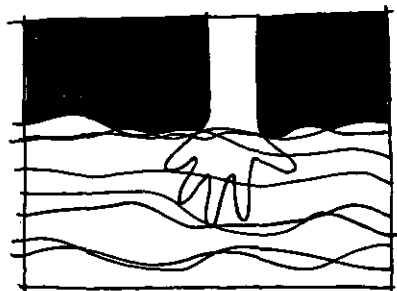
If using concrete, provide an apron with a minimum of 18 inches around the sand pit on all sides flush with grade for sweeping sand back into pit. Provide lids for sand areas when practical. Lids, preferably screen material, must allow light and air circulation for natural cleansing. Sandpits should be designed with a minimum three-foot-wide sand walk-off apron sloping 2% to 3% into the sandpit to permit sand to flow back into the pit. The perimeter enclosure of sand pits should be level. Sand pits should have positive drainage systems. Level sand pits are required because sand flows and tends to seek its

own level.

- **WATER SUPPLY.** This is essential for good sand play. A spring-loaded or dripping, tamper-proof faucet works best. Hoses may also be used.

Provide a limited-flow water source next to sand areas, such as hand water pumps or trickling water troughs, to allow for sand and water play. Locate drinking fountains away from sand play areas.

## WATER SETTINGS

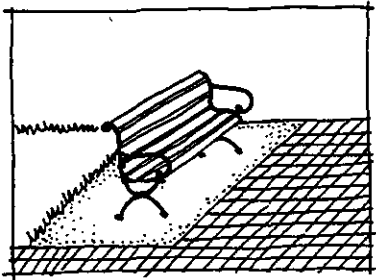


Water play areas are powerful playground attractions. Water play areas can be wading pools, spray pools, play pools, bubblers, sprinklers, troughs, or a running hose bib in a sandbox.

- Water areas must be sunny and protected from the wind.
- Maximum depth of hose-filled temporary ponds must not exceed six inches. Maximum depth of puddles must not exceed one inch nor one square yard per event; the maximum depth of a pond should be 14 inches.
- Pools must have adult supervision when water is being used.
- Fixtures must be vandal-proof.



## SEATING



- Provide seating at every playground, sand area and water location.
- All benches for adults should have backs.
- Benches should be grouped in various configurations for sitting alone or in groups.
- Choose materials that do not retain heat or cold. Avoid rough materials or those that may splinter. Wood should be clear grades and free of knots.
- Sitting heights of 18 - 20 inches are preferable.
- Sitting surfaces below 12 inches width are uncomfortable for many adults. Likewise, widths beyond 18 inches become awkward for normal length legs.
- Provision for heel space of three inches makes rising from seated positions easier.
- Seat surfaces should be pitched to shed water.
- Include a space beside bench for wheelchair or stroller (approximately 30 inches wide for average wheelchair).
- Seating areas should be located adjacent to (but not obstructing) pathways and developed trails, particularly along inclines.
- Texture change in walkways adjacent to seating areas will cue the blind to location of benches.
- Benches that contrast in color from surroundings are more easily distinguished by visually-impaired people.



# APPENDICES

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## A. THE PROCESS

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### BACKGROUND

In August 1989, the Montgomery County Planning Board requested that the Urban Design Division, in cooperation with the Parks Department, prepare recreation guidelines to be used when the Board reviews site plans for proposed subdivision. These private recreational facilities would offer an important supplement to the public park system.

Staff had done in depth research on the subject and presented its findings to the Planning Board in March 1990. Staff proposed the recreation guidelines consist of the following components:

- a. A **method** that establishes the adequacy of recreation facilities for a given population in a proposed site plan and assures consistency and equitability;
- b. Site and facilities **design criteria**; and
- c. Specifications and standards to ensure safety, ease of maintenance, and durability.

The Board approved the staff proposal and appointed an Advisory Work Group to assist staff in the further preparation of the guidelines. The Work Group's primary charge was to resolve those issues that require value judgment for determining the adequacy of recreation facilities in a given site plan. The guidelines are the result of the group's work with staff.

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### THE ADVISORY WORK GROUP

The Advisory Work Group was established by the Planning Board in June, 1990. The group was selected to represent the various interests as follows:

- Three citizen activists;
- Three developers (specializing in multifamily developments; small single-family developments, and upscale single-family developments);
- A president of a Homeowner Association management company;
- A designer and manufacturer of playground equipment;
- A director of recreation; and

- A lawyer who represents HOA's.

The Work Group held many formal and informal sessions. Members submitted independent comments as well. All aspects and elements of the guidelines were discussed and most were resolved through the consensus of the group.

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### PROPOSED METHOD FOR EVALUATING THE ADEQUACY OF RECREATION FACILITIES

An important part of these guidelines is a method that provides a standard measure of adequacy. According to the proposed method, the adequacy of the recreation facilities for a given subdivision is evaluated using a point system as follows:

1. The demand of the future residents for recreation is estimated (in points representing number of users) using the Demand Table.
2. The proposed recreation facilities are evaluated for their recreational benefits by a similar point system, using the Supply Table.
3. The provision of recreation facilities is considered adequate when the sum of the supply points matches, within 10%, the sum of the demand points.

This method addresses the various **age groups** of the population and the demographics of the different **housing types**. The values assigned to both the Demand and Supply Tables rely on a judgment of the level of recreation that is considered adequate for the county. It was therefore important that this judgment was made by a group of people that represents the various interests of the community.

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### DEVELOPING THE DEMAND AND SUPPLY TABLES

The Demand and Supply Tables are based on the premise that their numbers establish a level of adequacy that is considered acceptable. It must therefore be emphasized that it is the balance of these values that establishes the level of recreation.

The recreation demand table was developed as a product of two basic tables (see APPENDIX B):

- a. The Demographic Table, which estimates the numbers for tots, children, teens, adults, and seniors in the four housing types in the demographic data (SFD, TH, Garden Apartments, and High Rise). This table is based on Montgomery County demographic data (see APPENDIX D).
- b. The Conversion Table, which assigns weights that reflect the demand for recreation of a particular population category in a particular housing type. This table allows for value judgments and was therefore developed by the recreation Work Group. It was assumed the demand is affected mostly by housing type. For instance, in high-rise developments, all recreation needs must be met outside of the apartment, while in low density development, a substantial fraction of the recreation needs may

be met within the private yard. The Conversion Table also addresses other assumption the group made: (1) some of the adult recreation needs are met elsewhere, and (2) the tot category is effectively smaller than the actual numbers.

While the Demand Table relies on objective demographic data, the importance of the Supply Table is in its relationship to the demand and the comparative values of facilities, i.e., the value of a tot lot relative to a multipurpose court. In order to provide a rational basis for these values, it was assumed the supply values are a product of two factors, which were developed into tables (see APPENDIX C):

- a. The Utility Factor, the fraction of the recreation demand that is met through the use of a particular facility for each age group. For instance, tennis as a recreational activity would meet 30% of the recreation needs of the adult group. This table relies on value judgments and was therefore developed by the Recreation Work Group and staff.
- b. The Capacity of the particular facility (or the number of users it will accommodate). Table 5 in Appendix C, the Capacity Table, was developed by staff. The capacity is assumed for a period of an average week.

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#### ASSIGNING VALUES TO THE SUPPLY AND DEMAND TABLE

In order to increase the validity of the values assigned to the tables, an evaluation process was introduced as a basis for the Work Group's effort. Initial values were assigned to all six tables by staff to provide a working model. Staff then selected 11 different approved site plans for subdivisions and evaluated them based on the initial tables. These site plans, which were located in different areas of the county, included different subdivision sizes and different combinations of housing types.

The Work Group was divided into 4 small evaluation groups, each working with a staff member as a facilitator. Each group evaluated 5 - 6 plans for their adequacy of recreation based on the number of units and the resulting population. As a result, each site plan was evaluated by 2 - 3 groups. This evaluation was then compared by the small group to staff's evaluation, and modifications to the initial numbers were proposed. The tables were modified to address the subgroups' comments and discussed by the whole Work Group. These values were discussed in several meetings and were adjusted in accordance with the group's consensus. The final consensus was incorporated into the guidelines.

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#### SITE DESIGN CRITERIA, FACILITIES GUIDELINES AND SPECIFICATIONS

These guidelines and specifications were initially written by staff, based on the research. They provided the basis for the group's work. Again, the Work Group was divided into three subgroups, each working on a different subject. The subgroups worked efficiently and resolved many issues. The results were presented to the whole Work Group and discussed. The staff draft was modified accordingly, re-

viewed by the members, and the additional comments were incorporated into the guidelines.

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## CONCLUSIONS

The proposed guidelines promote recreation standards that a representative Work Group considers appropriate for the county. These guidelines represent a consensus of the various group representatives and should, therefore, be acceptable to the county residents, developers, and recreation experts in general. The Work Group will reconvene yearly to discuss any modifications that may be required as the guidelines are implemented.

## B. THE RECREATION DEMAND

The Recreation Demand Table (Table 3) is the product of two tables:

- a. The Demographic Table (Table 1) estimates the numbers for Tots, Children, Teens, Adults, and Seniors in the four housing types (Single Family Detached, Townhouse, Garden Apartments, and High-Rise). This table is based on Montgomery County demographic data (see APPENDIX C).
- b. The Conversion Table (Table 2) assigns weights that reflect the demand for recreation of a particular population category in a particular housing type. This table was developed by the Recreation Work Group. It was assumed the demand is affected mostly by housing density. For instance, in hi-rise developments, all recreation needs must be met outside of the apartment, while in low density development, a substantial fraction of the recreation needs may be met within the private yard. The conversion table also addresses other assumptions made by the group: (1) some of the adult recreation needs are met elsewhere, and (2) the number of actual users within the tot category is smaller than the group size.

**TABLE 1 - DEMOGRAPHIC TABLE**

(DEMOGRAPHIC DATA IS FOR 100 UNITS)

Type *	Tots	Children	Teens	Adults	Seniors	Community
SFD I	32	40	36	12	16	336
SFD II	32	40	36	212	16	336
SFD III **	28	24	20	212	16	336
TH	28	24	20	184	8	264
Garden	14	14	12	148	16	204
Hi-Rise	5	4	4	96	46	155

\* See page 66 for Definitions

\*\* The demographic data for SFD III was modified by the Advisory Workgroup, based on information from builders that households in small lots of detached homes tend to be similar to those in town-houses.

## DEFINITIONS

SFD I: Single-Family Detached, lots 20,000+ s.f.

SFD II: Single-Family Detached, lots 7,000 - 19,999 s.f.

SFD III: Single-Family Detached and Semi-Detached, lots under 7000 s.f.

TH: Townhouses and Single-Family Attached

GARDEN: Multiple-Family, 4 stories or less

HI-RISE: Multiple-Family, 5 stories or more

**TABLE 2 - CONVERSION TABLE**

Type *	Tots 0 - 4	Children 5 - 11	Teens 12 - 17	Adults 18 - 64	Seniors 65 +
SFD	10.3	0.5	0.6	0.4	0.5
SFD II	0.4	0.6	0.7	0.5	0.7
SFD III	0.5	0.8	0.8	0.6	0.8
TH	0.6	0.9	0.9	0.7	0.9
Garden	0.7	1	1	10.8	1
Hi-Rise	0.7	1	1	10.8	1

\* See above for Definitions

**TABLE 3 - DEMAND POINTS FOR 100 UNITS**

THIS TABLE IS A PRODUCT OF TABLES 1 AND 2

Type *	Tots 0 - 4	Children 5 - 11	Teens 12 - 17	Adults 18 - 64	Seniors 65 +
SFD I	9.6	20	21.6	84.8	8
SFD II	12.8	24	25.2	106.0	11.2
SFD III	14	19.2	23	127.2	12.8
TH	16.8	21.6	8	128.8	7.2
Garden	10.8	14	12	118.4	16
Hi-Rise	3.5	4	4	76.8	46

\* See above for Definitions



## C. VALUES FOR RECREATION FACILITIES

The Supply Values (Table 6) were assumed to be a product of two factors, which were developed into tables:

- The Utility Factor, which expresses the assumed fraction of the recreation demand that is met through the use of a particular facility. Table 4, the Utility Table designates values for each population category. For instance, it was assumed that tennis as a recreational activity would meet 30% of the recreation needs of the adult category.
- The assumed capacity of the particular facility (or the number of users it will accommodate). In Table 5, the Capacity Table, the capacity is assumed for an average week.

**TABLE 4 - RECREATION FACILITIES - UTILITY FACTOR**

THIS TABLE WAS DEVELOPED BY STAFF AND THE RECREATION WORK GROUP

Type	Tots	Children	Teens	Adults	Seniors
Tot Lot	.30	.10	.00	.10	.10
Play Lot	.00	.20	.10	.10	.10
Multi-Age Playground	.30	.17	.01	.10	.10
Picnic	.10	.10	.15	.15	.25
Open Play Area	.30	.30	.30	.25	.20
Multipurpose Court	.20	.20	.30	.15	.05
Tennis	.00	.10	.30	.30	.20
Play Field	.10	.25	.25	.25	.10
Bike System	.05	.10	.15	.15	.10
Pedestrian System	.10	.20	.20	.45	.45
Nature Trails	.05	.10	.15	.15	.15
Natural Areas	.00	.05	.10	.10	.05
Wading Pool	.15	.05	.00	.05	.05
Swimming Pool	.05	.20	.20	.25	.15
Indoor Pool	.10	.20	.20	.30	.40
Indoor Community Space	.10	.15	.30	.30	.40
Indoor Exercise	.00	.10	.10	.20	.15
Community Garden	.10	.10	.10	.20	.25

**TABLE 5 - CAPACITIES FOR RECREATION FACILITIES**

THIS TABLE WAS DEVELOPED BY STAFF. THE DISTRIBUTION OF USERS IS REFLECTIVE OF THEIR PROPORTION IN THE TOTAL POPULATION.

Type	Tots	Child	Teens	Adults	Seniors
Tot Lot	30	20	0	40	10
Play Lot	0	45	30	40	0
Multi-Age Playground	30	65	30	70	10
Picnic	10	10	10	33	8
Open Play	20	30	40	120	10
Multipurpose Court	15	50	50	70	50
Tennis	0	15	35	80	6
Play Field (Regulation)	20	60	80	160	20
Play Field (Junior)	20	60	80	20	20

The following facilities are assumed to have an adequate capacity to accommodate the population of the proposed project: Hiker/Biker System, Pedestrian System, Nature Paths, Natural Areas, Wading Pool, Swimming Pool, Indoor Facilities, and Community Gardens. Guidance for defining these capacities are found in Facilities Guidelines.

**TABLE 6 - THE SUPPLY TABLE**

THIS TABLE IS A PRODUCT OF TABLES 4 AND 5.

Type	Tots	Children	Teens	Adults	Seniors
Tot Lot	9	2	0	4	1
Play Lot	0	9	3	4	1
Multi-Age Playground	9	11	3	7	1
Picnic	1	1	1.5	5	2
Open Play	6	9	12	30	2
Multipurpose Court	3	10	15	10.5	2.5
Tennis	0	1.5	0.5	24	1
Play Field (Regulation)	2	15	20	40	2
Play Field (Junior)	2	15	15	30	2

Facilities that are assumed to be large enough for the project are not assigned recreation points per se. Rather, their recreation values are estimated by multiplying their utility factor with the respective demand points.

## D. DEMOGRAPHIC ANALYSIS

The demographic data used are based on the 1987 Montgomery County Census Update. These numbers may be revised when new data becomes available. The household composition is based on unit type.

### SINGLE-FAMILY DETACHED

There is much variation within the County. Since we are dealing with new subdivisions, we used the profiles that are typical of newer areas - e.g. Olney, Fairland, Germantown, Gaithersburg.

- Household Size .....3.35 persons
- Children 0 - 4 .....9% of total population
- Children 5 - 17 .....23% of total population
- Seniors .....5% of total population

Yield per 100 dwelling units:

- Total Population.....336
- Total Children .....108
- Ages 0 - 4.....32
- Ages 5 - 17 .....76
- Seniors .....16

### TOWNHOUSE

There is little variation in numbers among planning areas. County averages were used.

- Household Size .....2.64 persons
- Children 0 - 4 .....10.3% of total population
- Children 5 - 17 .....16.5 % of total population
- Seniors .....3.7% of total population

Yield per 100 dwelling units:

- Total Population.....264
- Total Children .....72
- Ages 0 - 4.....28
- Ages 5 - 17 .....44
- Seniors .....8

### GARDEN APARTMENTS

Because there is little variation, county averages were used.

- Household Size .....2.03 persons
- Children 0 - 4 .....6.74% of total population
- Children 5 - 17 .....12.4% of total population

- Seniors .....8.1% of total population

Yield per 100 dwelling units:

- Total Population.....204
- Total Children .....40
- Ages 0 - 4 .....14
- Ages 5 - 17 .....1726
- Seniors .....16

### HI-RISE APARTMENTS

*These typically consist of young households or senior people.*

*County averages were used although it is acknowledged that some high-rises may house seniors only, while others may have predominantly younger residents.*

- Household Size .....1.55 persons
- Children 0 - 4 .....3% of total population
- Children 5 - 17 .....5% of total population
- Seniors .....30% of total population

Yield per 100 dwelling units:

- Total Population.....155
- Total Children .....13
- Ages 0 - 4 .....5
- Ages 5 - 17 .....8
- Seniors .....46

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# ACKNOWLEDGEMENTS

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## PLANNING BOARD MEMBERS

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DAVIS M. RICHARDSON ..... Commissioner

*This project was launched during the term of Commissioners CAROL HENRY and JACK HEWITT. They both inspired, supported, and made significant contributions to the guidelines.*

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## THE MARYLAND-NATIONAL CAPITAL PARK & PLANNING COMMISSION STAFF

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## M O D I F I C A T I O N S

On November 23, 1992, the Planning Board approved the following amendments to the Guidelines for Recreational Amenities, as proposed by the staff and the Work Group in the annual review meeting:

### 1. Vita Course

Add facility #29 Vita Course to p. 5 with the following supply values:

0.00xD1, 0.00xD2, 0.00xD3, 0.05xD4, 0.05xD5

Add the following definition to p. 12:

#29. VITA COURSE Several outdoor exercise stations located along a pedestrian path.

### 2. Off Site Amenities

Add the following language to p. 9:

If a developer installs or constructs recreational facilities which meet the definition of off-site amenities outlined above and, if the facilities will be utilized primarily by the community which is being developed, then

o The credit for each off-site facility must not exceed 85% of the supply value for each population category.

o The total credit for all off-site facilities must not exceed 85% of the required demand points for each population category.

### 3. Thresholds

Amend p. 10 as follows:

Replace "single family homes" with "units".

### 4. Playfields

Add the following language to pages 31, 32, 33, and 34:

No supply points may be assigned to a play field that overlaps another.



5. Community Gardens

Add the following language to p.45:

**"OTHER FEATURES: A tool shed and a seating area should be considered for large plots".**

**E R R A T A**

1. Table 1 page 3:  
Demand points for seniors in TH should be 9.
2. Table 1 page 65:  
Population number for adults in SFD I should be 212.  
Population number for seniors in TH should be 10.
3. Table 2 page 66:  
Conversion number for tots in SFD I should be 0.3.
4. Table 3 page 66:  
Demand points for seniors in TH should be 9.
5. Demographic Analysis pages 69 - 70:  
Yield of seniors for 100 unit townhouses should be 10  
Yield of ages 5 - 17 in garden apartments should be 26.

The Maryland-National Capital Park & Planning Commission  
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0000000071  
RECREATION GUIDELINE

